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OF THE FAMILY: AN EMPIRICAL BASIS FOR THE
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Andrews University
School of Graduate Studies

ASSESSING THE SOCIAL-PSYCHOLOGICAL INTERIOR
OF THE FAMILY: AN EMPIRICAL BASIS FOR
THE STUDY OF FAMILY FUNCTIONS

A Dissertation
Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
John E. Rodgers
January 1979

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OF THE FAMILY: AN EMPIRICAL BASIS FOR
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in partial fulfillment of the requirements
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John E. Rodgers

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ABSTRACT

ASSESSING THE SOCIAL-PSYCHOLOGICAL INTERIOR
OF THE FAMILY: AN EMPIRICAL BASIS FOR
THE STUDY OF FAMILY FUNCTIONS

by

John E. Rodgers

Chairperson: Conrad A. Reichert, Ph.D.

ABSTRACT OF GRADUATE STUDENT RESEARCH
DISSERTATION

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Department of Education

Title: ASSESSING THE SOCIAL-PSYCHOLOGICAL INTERIOR OF THE FAMILY:
AN EMPIRICAL BASIS FOR THE STUDY OF FAMILY FUNCTIONS

Name of researcher: John Edward Rodgers

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Date completed: January 1979

Problem

Although the family has been the subject of continued research over the years, recently interest in family theory and family therapy has increased. According to contemporary studies, there is a lack of scientific information about family life relevant to the needs of those working in the area of helping people relate to one another as a family. The purpose of this study was to

give an empirical test to the eight hypothesized family functions as identified by Reichert (1978).

Method

An instrument, the Family Functions Scale (FFS), was developed to assess some of the activities and services in which families engage. The scale was pretested and validated. A non-probability, purposive sample of 507 high-school seniors was administered the Family Functions Scale. Their responses were submitted to a number of factor analyses. The purpose of these analyses was to extract the optimum number of factors.

Results

The study revealed that eight factors provided the most interpretable groupings and the most acceptable arrangement. Each factor represented a family function and was appropriately named. Therefore, Hypothesis 1, that the factor analysis will produce eight optimal clusters of activities and services, was supported.

Hypothesis 2, that the clusters produced will contain family activities and services which correspond to the family functions which Reichert defined as Reproductive, Economic, Protective, Nurturant, Philosophical, Socialization, Education, and Personalization, was partially supported.

The existence of each individual function as identified by Reichert was confirmed with respect to the Nurturant, Socialization, Personalization, Philosophical, and Reproductive functions. However, the Education function was not confirmed. The name of the Protective function was changed to Regulatory function. Therefore,

with the division of the Economic function into the two respective functions--Sharing Resources and Self-Supportive--eight family functions emerged.

Conclusions

The Nurturant, Socialization, Regulatory, Self-Supportive, Personalization, Philosophical, Sharing Resources, and Reproductive functions are the eight functions of the family as revealed by the empirical approach of this study.

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J. E. R.

CHAPTER I

INTRODUCTION

Statement of the Problem

A number of varied and detailed scientific studies have been conducted over the years concerning the family. These studies have centered on several areas. According to Blood (1976), some of these areas have been researched to the "point of diminishing returns" (p. 8). He enumerates them as follows:

1. Sex--premarital and extramarital
2. Mixed marriages
3. Class differences in family behavior
4. Age at marriage
5. The wife's employment
6. Kinship
7. Family power structure
8. Family planning
9. Parenthood as crisis
10. Child-rearing methods and the personality structure of children
11. Family life cycle
12. Divorce

It seems that there is a need for concentrated scientific effort in more subtle and less easily measured areas of family living.

Blood (1976) bears this out in stating that "a close look at the clustering of the literature suggests that many of our choices of research problems are based on such nonscientific factors as fads and the accessibility of data" (p. 8).

Blood (1976), a family living educator and a marriage counselor, feels that family members relating to one another is "the essence of family living" (p. 10). He is quite direct in reporting the lack of scientific knowledge about family life to aid those working in the field of helping people relate to one another as a family. He states: "Despite the fact that overall there is an acute shortage of scientific knowledge about family life, some areas have been so heavily researched that energies might be shifted from them to untrodden areas" (p. 8).

An appraisal of the direction of contemporary and past research on family functions reveals conclusions that are primarily hypothetical in nature. Speaking of the research needs of a family life educator and marriage counselor, Blood (1976) states:

I am acutely aware that most of the work which I do as a marriage counselor and as a workshop leader has no scientific basis. Many of my interventions are based on intuitive leaps and hunches whose basis I do not fully understand. (p. 7)

Blood feels that there is "a desperate need" for a shift of research priorities and methods "to make them more relevant to the needs of those who work directly with family members" (pp. 7-8).

Such statements as those above suggest the timeliness of empirical investigation and analysis of the family. They also suggest that there is a need for more empirical research on the question of family functions. According to Sussman (1963),

"Effective additions to the body of social science theory can be made only through empirical research" (p. 548).

As Cottrell (1963), referring to the family puts it, "It is both surprising and extremely embarrassing that social psychologists have never given systematic attention to the problem of specifying those characteristics that make for competent functioning of the individual in a democratic context" (p. 550).

First of all, most of the theoretical literature is concerned with analysis and description of the structure of the family with fewer references to family functions. Secondly, there is a considerable variance in opinion, not only as to the universality of family functions, but also with reference to the notion that the family is losing most of its traditional functions. Third, the efforts that have been made to measure family relationships and functions have been mainly in the area of attitudes, values, and marital adjustment.

Spanier (1976) reports that "methodologists cannot ignore the clear, continuing need that family researchers have for adequate measures, including those of the paper and pencil type, in order to assess the quality of adjustment in marital relationships" (p. 15). This applies with equal force to assessing the quality of family functions. It has long been recognized that "through family interaction, the various functions are performed" (Robert Neuhaus & Ruby Neuhaus, 1974, p. 2).

Notwithstanding the fact that increasing attention has been given by anthropology, sociology, psychiatry, and social work to the study of interaction patterns of the entire family as a whole

(Sussman, 1974), p. 357), psychology has not kept pace with this broader concept of family interaction.

Handel (1965) states that "psychology has been concerned with events within the family but has made little effort to conceptualize and study the family as a unit" (p. 358). Inasmuch as it is reported that "one of the internal activities of the family is the disposing of negative feelings which to some degree are inevitably generated in family living" (Martinson, 1972, p. 113), the assessing of these internal activities falls squarely within the discipline area of psychology.

It is seen that "a social psychology of the family that seeks to capture and comprehend the interplay of self and collectivity in family life" (Handel, 1965, p. 1) is the discipline by which greater understanding of family functions might be gained. An assessment device which analyzes and describes more fully and effectively the way in which the family functions for itself and for its members, would be a significant contribution to the body of psychological knowledge.

This device should be based upon a functional approach. This type of approach to the study of the family, whereby the interaction of members within the family unit is emphasized, would be the best means of gaining greater understanding of the family. As a result, the emphasis upon family interaction would highlight the combined activities the family performs for itself and for its members.

Research reveals that family theorists have identified various numbers of functions. However, these functions lack empirical support, and the mere identification of them fails to meet the current

need. Reichert (1978) performed a valuable service in that he synthesized a list of eight "universal" functions from the varied list of family functions identified by leading theorists. For this reason, his list was used for this study. Reichert's work like that of the others, however, was rationally derived.

The problem, therefore, is that not enough empirical work has been done in the area of family functions. This study consequently sought to remedy this.

Purpose of the Study

The purpose of this study was to give an empirical test to the eight hypothesized family functions as identified by Reichert (1978). For this study, family functions are referred to as the activities and services which the family characteristically performs. These activities and services result in maintenance and developmental outcomes in the social and personality structures of the family.

Definition of Terms

The definitions pertinent to this study are the following:

A family. A social group characterized by common residence. It includes at least one adult and one or more children, own or adopted.

Family functions. Activities and services which the family characteristically performs. These activities result in maintenance and developmental outcomes in the social and personality structures of the family.

Family activities and services. "Specific universal behaviors which broadly include such categories as working, loving, playing, governing, fighting, protecting, and worshipping" (Ogburn and Nimkoff, 1955, p. 125).

Universality. "Universality of family functions implies the existence of these functions throughout time and across geographical areas" (Reichert, 1978, p. 1).

Organization of the Study

This report is organized into five chapters.

Chapter I provides a general orientation to the study by way of the Introduction. It contains the statement of the problem, the purpose of the study, and the definition of terms.

Chapter II contains a review of related literature and identifies the specific hypotheses that were tested.

Chapter III discusses the research design, development of the instrument, and the characteristics of the population and sample. It includes the procedures of data gathering and the statistical techniques for analyzing the data.

Chapter IV presents a discussion of the statistical treatment, an analysis and summary of the data, and a discussion of the findings.

Chapter V contains a summary of the study and its implications, suggestions for implementing the results, and recommendations for further research. An Afterword concludes the chapter.

CHAPTER II

REVIEW OF RELATED LITERATURE

A wide variety of literature is available which presents descriptions of the family and family functions. This chapter will give an overview of the related literature in the following general areas:

1. Definitions of the family
2. Family functions defined
3. Social-psychological viewpoint of family functioning
4. Family functions as identified by theorists
5. The Reichert Model of Eight Universal Family Functions

Definitions of the Family

The following are some representative definitions of "family" as encountered in the literature:

A Family

A social group characterized by common residence, economic cooperation, and reproduction. It includes adults of both sexes, at least two of whom maintain a socially approved sexually relationship, and one or more children, own or adopted, of the sexually cohabiting adults. (Murdock, 1949, p. 1)

A semiclosed system of actors occupying interrelated positions defined by the society of which the family system is a part as unique to that system with respect to the role content of the

positions and to ideas of kinship relatedness. The definitions of positional role content change over the history of the group. (Rodgers, 1973, p. 15)

A group of persons united by ties of marriage, blood, or adoption; constituting a single household; interacting and communicating with each other in their respective social roles of husband and wife, mother and father, son and daughter, brother and sister; and creating and maintaining a common culture. (Burgess, Locke, and Thomes, 1963, p. 2)

Some theorists are not so detailed in giving a definition of the family. Davis (1949) considers it to be a primary group which "has a spontaneity and freedom that comes from complete mutual habituation within a small circle" (p. 405).

Kirkpatrick (1963) views the family as a process and a social institution. He says that "the family institution is one of the basic social institutions. Institutions can be broadly viewed as generally accepted ways of attaining important social ends" (p. 11). Kirkpatrick includes the concept of family life as an ongoing experience when he not only recognizes the importance of the family institution but also stresses what might be called the family process (p. 24).

No one definition among those found in the literature proved suitable for the purposes of this study. Therefore, the following was synthesized from a number of definitions of the family: The family is a social group characterized by common residence. It includes at least one adult and one or more children, own or adopted.

Family Functions Defined

Whether the family is considered to be a social institution, a primary group, a social group, or a semiclosed system, it is

primarily seen as having particular responsibilities to fulfill. This group, a basic organized unit of society, performs certain practices unique to it. Skolnich and Skolnich (1977) bear this out in affirming that "the family means many things to many people but in essence it refers to those socially patterned ideals and practices concerned with biological and cultural survival of the species" (p. 579). This seems to infer that there are specific functions that are vital to the survival of the family.

Different writers have outlined what is meant by family functions. Two brief definitions follow: "Family functions are general consequences of activities performed within the family. Activities refer to specific behavioral acts or sequences and patterns" (Bell & Vogel, 1960, p. 6). "Family Functions are simply concerned with describing how the family actually operates" (Adams, 1971, p. 80).

Blood and Wolfe (1960) state that a family function is a service that families perform. These functions may serve society at large by producing and educating new members for society, by family self-maintenance as an on-going unit, and by meeting the needs of the members of the family (p. 76).

For the purpose of this present study, the following definition of family functions was used. Family functions are activities and services which the family characteristically performs. These activities result in maintenance and developmental outcomes in the social and personality structures of the family.

Activities, Services, Functions and
Family Behaviors as Related Terms

What are family activities? Ogburn and Nimkoff (1955) provide a brief response to this question: Family activities and services are specific universal behaviors which broadly "include such categories as working, loving, playing, governing, fighting, protecting, and worshiping" (p. 125).

It was Cunningham (1940) who asked the question "Why study family behavior?" and answered by saying, "The first reason for studying the behavior of individual members of families toward one another is that we may become better acquainted with ourselves as members of family groups" (p. 21).

Cunningham further equates behavior as well as activities with family functions. He states:

By behavior, we mean, first of all, commonly observed activities, the things that most family groups do. What do families do--how do they act? What functions characterize the family as a unique social organization? The family serves as a normal and controlled outlet for the mating impulses of men and women. It brings children into the world and assumes responsibility for protecting them and keeping them well. It often unites with other families in maintaining old institutions and in encouraging new developments in community life. (p. 26)

Defining family behavior as the "reactions of individual members of families to one another," Cunningham further states that it is "not only the readily observed acts of family members but the way they seem to feel about their overt behavior" (p. 26).

Cunningham finally concludes that by observing the adjustments of men, women, and children living together as families, it may be possible to discover some basic human wants common to all.

"This should help us to a better understanding of the behavior of our own families and of others as well. Through a study of family behavior we may be able to get a better grasp upon large social problems and to increase the scope of our social interests" (p. 21).

Equating functions with activities, Truxal and Merrill (1953) say that "the functions of an institution refer to the activities which it characteristically performs" as they define the nature of family functions (p. 312).

The definition of family activities and services for the present study is borrowed from Ogburn and Nimkoff (1955). They state that they are "specific universal behaviors which broadly include such categories as working, loving, playing, governing, fighting, protecting, and worshiping" (p. 125).

For Ogburn and Nimkoff (1955), family functions are both activities and services. "Formerly the family was the principal locus of economic activity, and the source of many educational, recreational, religious, and protective services" (p. 15). They later point out that protection, education, and recreation are more and more the functions of the state and/or industry.

Family functions and family activities are intimately related. One is the manifestation of the other. This implies the possibility of identifying specific family functions by identifying the activities which accompany them.

Since family functions and activities coincide, a study of specific activities and services should give a clue to specific functions which the family characteristically performs. Winch and

Spanier (1974) lend support to the study of identifying a family function by identifying its accompanying activity. They consider categories of family activities as functions and proposed the provision of the following activities if a society is to carry on indefinitely:

- (a) replacement of members lost through death or emigration, generally through sexual reproduction (replacement function);
- (b) production and distribution of goods and services (economic function);
- (c) accommodation of conflicting interests, resolution of disputes, and protection from violence (political function);
- (d) maintenance of a sense of purpose and providing of answers to unanswerable questions (religious function); and
- (e) training of new recruits to be able to assume adult roles (socializing-educational function). (p. 24)

Opposing Positions

Not all theorists or researchers agree that the family as portrayed above is a reality. Some state that the family is relinquishing its functions and, therefore, is becoming dysfunctional. The following viewpoints are presented which refute the naturalness of the family, the evidence that the family is the basic institution of society, and that the functions of the family are stable and numerous.

Calling the family an abstraction, Keller (1971) states:

If we wish to understand what is happening to the family--to our family--in our own day, we must examine and observe it in the here and now. In so doing it would be well to keep in mind that the family is an abstraction at best, serving as guide and image of what a particular society considers desirable and appropriate in family relations, not what takes place in actual fact. (p. 4)

According to Martinson (1972), the complexity of our society may be the cause of differentiation, that is, the transferring of

family functions to other more specialized systems or institutions.

He continues:

To say that the family has thereby lost the educational function may be to prejudice the data with an interpretation that fails to do justice to the fact that there are many functions which the family simply cannot perform effectively. America may have developed a new type of nuclear family. (p. 8)

Along with seeing the family as characterized by rapid social change, some sociologists also view it as disintegrating, becoming more and more unstable as it decreases its traditional functions even to the point of losing some of them altogether. While the family becomes "a mere incidental cohabitation of male and female," the home becomes "a mere overnight parking place mainly for sex relationships" (Martinson, 1972, pp. 5-6).

Summarizing changing family functions, Burgess, Locke and Thomes (1963) speak of the increase of activities outside of the home as indexes of the decrease of some traditional family functions.

Supporting Positions

According to Kirkpatrick (1963) sociologists have recognized traditional family functions as economic, religious, protective, recreational, educational, and reproductive, but they sometimes decry the decline of these functions because of "the increased activity of other social institutions. Solace is usually found in the survival of reproductive and companionship functions" (p. 19). The provision of security in a psychological sense, the control of jealousy, along with the determination of status and status relationships are among other functions also attributed to the family (p. 19).

Some sociologists view the American family as improving rather than disintegrating, with more and more longer lasting marriages, more remarriages, more couples establishing their own homes and having children. "America is seen as a family-affirming society, and the American people by their actions as family-affirming people" (Martinson, 1972, pp. 7-8).

The following statement by Martinson affirms the belief that the family is vital to our society today:

We think the trend of the evidence points to the beginning of the relative stabilization of a new type of family structure in a new relation to a general social structure, one in which the family is more specialized than before, but not in any general sense less important, because the society is dependent more exclusively on it for the performance of certain of its vital functions. (pp. 9-10)

Ogburn and Nimkoff (1955) feel that "the home continues to be the major center of affectional life, even though divorces are increasing" (p. 143).

Winch (1971) mentions specifically nurturance as a family function:

The arrival of a child immediately calls into play two of the family's derived functions: position-conferring and nurturance" (p. 351).

What is nurturance? The behaviors denoted by "nurturance" are reasonably clear--feeding the infant, keeping him warm, clean, and dry, and so on. To many persons, however, nurturance has a far broader set of denotations whereby it includes not only the ministrations to the vital processes, but also such behaviors as making "soothing" sounds, stroking the infant's skin. (p. 356)

Truxal and Merrill (1953) emphasize that the biological function of the family is "that of providing a socially sanctioned relationship for the procreation, birth and postnatal care of

children. This biological function is the cornerstone of the family" (p. 339).

Truxal and Merrill further support the reality of the family and the enduring sense of its functions in declaring that socialization is "the final function maintained by the family with much of its former significance which is that of socializing the individual" (p. 354).

Universality of Family and Family Functions

Inasmuch as leading theorists in the field of family studies such as Murdock, Ogburn, and Nimkoff have discussed the universality of the family and family activities, this review of literature would not be complete without touching on this aspect of family functioning.

According to Queen and Habenstein (1974), certain facts stand out in all the varied forms of family life, such as the ties between mother and child and the regulation of sexual relations. "In nearly all cultures about which we have information, the institution we call family is identified with four functions: procreation, orientation, division of labor between the sexes, and status-giving" (pp. 9-10).

Discussing modern family functions and summarizing them into sets of categories as working, loving, playing, governing, fighting, protecting, and worshiping, Ogburn and Nimkoff (1955) point out that these are universal activities as "families have been either centers for, or have engaged as families in, most of the activities common to mankind" (p. 125).

For the purpose of this study, the term "universal" in reference to family functions is meant to include those activities and services which the family has always performed and will continue to perform throughout time and across geographical boundaries.

Having surveyed 250 representative cultures, Murdock (1949) concluded:

The nuclear family is a universal human social grouping. Either as the sole prevailing form of the family or as the basic unit from which more complex familial forms are compounded, it exists as a distinct and strongly functional group in every known society. (p. 2)

Claiming four universal family functions (the sexual, the economic, the reproductive, and the educational), Murdock also cites other family functions such as religious, recreational, and social status, which he calls "additional functions." These functions are frequently, "but not universally," performed by the family (p. 11).

Murdock further states:

This universal social structure, produced through cultural evolution in every human society as presumably the only feasible adjustment to a series of basic needs, forms a crucial part of the environment in which every individual grows to maturity (p. 11).

Supporting Murdock, Davis (1949) stressed four family functions (reproduction, maintenance, placement, and socialization) as being "the core functions with which the family is always and everywhere concerned" (p. 395). He feels that they are the ones which "universally require a family organization. They are universally the province of the family" (p. 395).

Reiss (1965) challenged Murdock's proposition of four universal functions of the family: "Looking over the four functions

that Murdock associates with the nuclear family, one sees that three of them can be found to be absent in some cultures" (p. 447). Believing that there is only one universal family function, Reiss continues:

The conception of the family institution being developed here has in common with some other family definitions an emphasis on socialization of offspring. The difference is that all other functions have been ruled out as unessential and that only the nurturant type of socialization is the universal function of the family institution.

In summation then, following is the universal definition of the family institution: The family institution is a small kinship structural group with the key function of nurturant socialization of the newborn. (pp. 447-449)

Spiro (1954) claims that "the universality of the family has always been accepted as a sound hypothesis in anthropology" (p. 839). Further support for family universality is cited by Parsons (1974):

The common sense of social science has tended to see in the universality and constancy of structure of the nuclear family a simple reflection of its biological function and composition; sexual reproduction, generation difference and the differentiation by sex in the biological sense. (p. 14)

It seems to be clear that human personalities are universally socialized in nuclear families. (p. 21)

Adams (1975) reports as universal those family functions which accomplish certain goals for any society to insure its continued existence. These include the reproduction of individuals to replace those who die, the protection of its boundaries, the solving of economic problems of physical survival, and the motivation of persons for positions of leadership. "Among these necessary functions are some that appear to be performed by the family in every society; these are called 'universal family functions,' or functions that the family has always carried out everywhere" (p. 83).

Reichert (1978) identified eight universal family functions as follows: the reproductive, economic, protective, nurturant, philosophical, socialization, education, and personalization functions. He states that "family functions continue to operate in various respects regardless of the chronological ages of the particular family members. They have a life span connotation, in that they continue to result in maintenance and development throughout the life span of the individual" (p. 1). A description of the Reichert model will be given later in this chapter.

Social-Psychological Viewpoint of Family Functioning

The provision of security in a psychological sense, the control of jealousy, along with the determination of status and status relationships, are among other functions also attributed to the family (Kirkpatrick, 1963, p. 19).

Handel (1967) argues the logic of studying the family from a holistic point of view (pp. 2-6). The family is a unit and should not always be simply segmented into husband-wife, mother-child, father-child relationships. The family is a living group of interacting individuals, and there must be concern for its intra-familial organization as each member relating to the other members, create and develop as they help to evolve a corporate character while utilizing each member's individuality.

The psychosocial interior of the family is not an isolated realm. It is a region of a larger social world. Families do not merely reflect the larger culture and social structure; they create meanings and relationships and individualities, not all of them welcomed by the larger society. (p. 2)

The psychosocial interior is that region of the universe where the members of a family meet and make a life together. It is a region of the mind, that "place" where there is a meeting of minds primarily in the sense of individual selves confronting, engaging, and being struck off from one another, rather than in the usual sense of reaching agreement through rational discussion. (pp. 1-2)

The importance of the psychological foundations of the family is presented by Kirkpatrick (1963) as he shows that the family is influenced by psychosocial factors as well as psychobiological factors (pp. 30-50). Whereas emphasis has been made upon the hereditary factor, "it should be recognized, however, that the factors of culture and variable or personal-social behavior operate additionally in accordance with basic imperatives of group living" (p. 44).

Assessing the social-psychological foundations of the family and relating them to intrafamilial growth and interaction, presupposes a concern for internal family activities and the relating of them to external influences of society. Bell and Vogel (1960) say that "it is the nuclear family's duty to see that new members are socialized into the basic value system. The family also has a significant part in insuring that all members continue to abide according to the societal values" (p. 18).

Internal family activities, according to Bell and Vogel (1960), are essential for "stability and smooth operation." They feel that "most activities carried on in the family have functional significance for the family itself and external systems, and the various functions fulfilled can be separated only analytically" (p. 19). These internal activities include integration and solidarity, pattern-maintenance, family leadership, and task

performance. Bell and Vogel emphasize that both internal and external family activities go hand in hand to insure and maintain a satisfactory familial-societal relationship. They state, however, that "in examining these internal activities, it should be kept in mind that meeting a function within a family does not necessarily lead to the fulfillment of the analogous function for the society" (p. 19).

It seems appropriate that this study was concerned with the social-psychological interior of the family, which means that the focus was on the internal activities of the family.

Family Functions as Identified
by Theorists

How many family functions are there? Mollie Smart and Laura Smart (1976) offer an answer to this question. They say that the number of family functions may be unlimited, that "one of the marvelous and unique characteristics of the family is that its fields of action are not strictly defined and it can specify new roles, duties, rights, and actions as needed" (p. 15).

Some theorists place family functions in two overall categories. Parsons (1974) presents such a distinction. He calls family functions "instrumental" and "expressive." Instrumental functions are those primarily concerned with relations of the group to the situation external to it. This includes "adaptation to the conditions of that situation and establishment of satisfactory goal-relations for the system vis-a-vis the situation" (p. 15).

Expressive functions are defined as those which are primarily concerned with the solidarity or the harmony of the group, "the relations internally of the members to each other and their 'emotional' states of tension or lack of it in their roles in the group" (p. 15).

Winch (1971) defines five family functions:

1. Replacement function

Reproduction replaces members of a society through the creation of new lives. Other kinds of replacement are through adoption, capture, or voluntary immigration. Although births occur outside the family, the usual and approved, i.e., the institutionalized locus of reproduction is within the family. (p. 153)

2. Position conferring function

This refers to the process of launching new members into social systems and thus integrating them into the total society. (p. 191)

3. Emotional gratification

This deals with man's responses to and demands upon his fellows. (p. 239)

Let us conceive of one part of the function of providing emotional gratification—a subfunction perhaps—as that of providing security. (p. 239)

4. Nurturant function

As long as we have the vital processes in mind, the behaviors denoting by "nurturance" are reasonably clear—feeding the infant, keeping him warm, clean and dry, and so on. To many persons, however, nurturance has a far broader set of denotations whereby it includes not only the ministrations to the vital processes, but also such behaviors as making "soothing" sounds, stroking the infant's skin, and so on. (p. 356)

5. Socialization

The process of socialization includes learning goals to be pursued and those to be avoided; it includes a conception of approved and condemned techniques for pursuing goals and for permitting and inhibiting the expression of impulses. (p. 385)

Davis (1949) characterizes family functions as four main social functions falling in four closely related divisions: re-production, maintenance, placement, and socialization of the young (p. 395). Davis continues to add functions to the list but entitles them subsidiary functions which are ramifications of the main social functions. He infers that the family performs many functions.

These have many ramifications and can be broken down into a host of subsidiary functions, but they nevertheless do not embrace all the functions that the family performs. Like any other organized group the family in any given society will be found to perform, at least in part, certain other social functions such as economic production, care of the aged, political control, and physical protection. (p. 395)

Theorists vary substantially in the number of functions they consider the family performs. Kirkpatrick (1963) enumerated the following four:

1. Cultural regulation of sex expression
2. Cultural regulation of marriage as a preliminary to reproduction
3. The regulation of child rearing, including the formation of sex and age types
4. The regulation of interwoven relationships of sex, age, and kinship groups (p. 53).

Various writers have listed what they feel to be basic family functions. Even though these writers vary in the number of family functions they identify, and even though they present a wide spectrum of terminology with reference to family functions, there still is a commonality among them with respect to what the functions are. A number of viewpoints are given here. The lists are groups according

to the number of functions identified by the writers. Group I includes those with one or two functions. Group II includes those with three or four functions. Group III includes those with five or six functions. Group IV includes those with seven or eight functions. Group V includes those with nine or ten functions.

Group I--One or Two Functions

Ira L. Reiss (1965)

1. Nurturant socialization

Clark E. Vincent (1966)

1. Adaptive function

Talcott Parsons and R. F. Bales (1955)

1. Socialization of children
2. Pattern maintenance and tension management functions in relation to adults

Group II--Three or Four Functions

Bert N. Adams (1971)

1. The affective function
2. The economic function
3. Socialization

Robert Neuhaus and Ruby Neuhaus (1974)

1. The biological function
2. The socialization function
3. The individual development function

Normal W. Bell and Ezra F. Vogel (1960)

Functions of

- | | |
|------------|-----------------|
| 1. Economy | 3. Community |
| 2. Polity | 4. Value system |

Rose Laub Coser (1974)

1. The institutionalization of social fatherhood
2. The establishment through marriage of alliances outside of blood relations

3. The imposition of social norms on the biological organism
4. The bestowing of social identity on its members

Bernard Farber (1964)

- | | |
|-------------------|------------------------------|
| 1. Reproduction | 3. Socialization of children |
| 2. Sex activities | 4. Economic activities |

Suzanne Keller (1971)

- | | |
|-------------------------|---|
| 1. Reproduction | 4. Emotional or affectional gratification |
| 2. Status Conferment | |
| 3. Sexual gratification | |

Floyd Martinson (1972)

1. Supplying or replacing members for the society (birth function)
2. Preparing children to take their place in society (socialization)
3. Maintaining and motivating both parents and children for participation in society
4. Disposing of negative feelings

George Peter Murdock (1949)

- | | |
|----------------------|-------------------------|
| 1. Sexual regulation | 3. Economic cooperation |
| 2. Reproduction | 4. Education |

Jesse R. Pitts (1964)

1. Maintenance of members in physical and mental health (Economic cooperation)
2. Tension reduction
3. Reproduction
4. Training of children for community roles

Group III--Five or Six Functions

Panos D. Bardis (1964)

- | | |
|----------------|-----------------|
| 1. Economic | 4. Recreational |
| 2. Educational | 5. Protective |
| 3. Religious | |

Robert O. Blood and D. M. Wolfe (1960)

- | | |
|---------------------------|---------------------------------|
| 1. Economic | 3. Bearing and rearing children |
| 2. Mental health function | 4. Life-long companionship |
| | 5. Love and affection |

William J. Goode (1964; 1971)

- | | |
|-------------------------|---|
| 1. Reproduction | 4. Social control |
| 2. Physical maintenance | 5. Placement of child in social structure |
| 3. Socialization | |

Robert B. Hill (1972)

- | | |
|----------------------------|-----------------------------------|
| 1. Strong kinship bonds | 3. Adaptability of family roles |
| 2. Strong work orientation | 4. Strong achievement orientation |
| | 5. Strong religious orientation |

Robert F. Winch (1971)

- | | |
|-------------------------|---------------------------------|
| 1. Replacement function | 4. Position conferring function |
| 2. Nurturant function | 5. Emotional gratification |
| 3. Socialization | |

Dorothy R. Blitsten (1963)

1. Sexual satisfaction
2. Procreation
3. Care and socialization of children
4. Psychological and physical security
5. Introduction of the young into organization necessary for the attainment of their individual satisfaction
6. Protection and provisioning of adults while they work in other spheres

Ernest R. Groves (1940)

- | | |
|-------------------------|---|
| 1. Support of culture | 4. Support of sex status |
| 2. Support of education | 5. Support of formal institutions |
| 3. Support of religion | 6. Support of government and public opinion |

Kingsley Davis (1949)

- | | |
|-----------------|------------------------------------|
| 1. Reproduction | 4. Affectional function |
| 2. Maintenance | 5. Bearing and rearing of children |
| 3. Placement | 6. Socialization of young |

Group IV--Seven or Eight Functions

Ernest Burgess, Harvey J. Locke, and Mary Thomas (1963)

- | <u>Retained and maintained</u> | <u>Changing and decreasing</u> |
|--------------------------------|--------------------------------|
| 1. Affectional activities | 1. Economic activities |
| 2. Cultural activities | 2. Protective activities |
| | 3. Educational activities |
| | 4. Recreational activities |
| | 5. Religious behavior |

Reuben Hill and Roy H. Rodgers (1964)

- | | |
|------------------|-------------------------|
| 1. Reproduction | 5. Physical maintenance |
| 2. Protection | 6. Status-conferring |
| 3. Education | 7. Affection-giving |
| 4. Socialization | |

Clifford Kirkpatrick (1963)

- | | |
|------------------|-----------------|
| 1. Economic | 5. Religious |
| 2. Reproductive | 6. Recreational |
| 3. Child-rearing | 7. Protective |
| 4. Educational | |

Barrington Moore, Jr. (1958)

- | | |
|---------------------|--------------------------------------|
| 1. Giving affection | 5. Realizing creative potentialities |
| 2. Raising children | 6. Warm and Supportive functions |
| 3. Socialization | 7. Economic function |
| 4. Personalization | |

John Moge (1964)

- | | |
|-----------------|-------------------------|
| 1. Affection | 5. Sexual gratification |
| 2. Reproduction | 6. Conference of status |
| 3. Inheritance | 7. Consumption |
| 4. Residence | 8. Education |

William F. Ogburn and M. F. Nimkoff (1955; 1958)

- | | |
|---------------|-----------------|
| 1. Economic | 5. Governmental |
| 2. Recreation | 6. Religious |
| 3. Combat | 7. Educational |
| 4. Protective | 8. Personality |

Conrad Reichert (1978)

- | | |
|------------------|--------------------|
| 1. Reproductive | 5. Personalization |
| 2. Economic | 6. Philosophical |
| 3. Socialization | 7. Nurturant |
| 4. Education | 8. Protective |

Group V--Nine or Ten Functions

Andrew Billingsley (1971)

- | | |
|---------------------|--|
| 1. Economic | 6. Socialization of children |
| 2. Family stability | 7. Child rearing |
| 3. Sex | 8. Provision of companionship |
| 4. Reproduction | 9. Generation and propagation of the various forms of love |
| 5. Security | |

Andrew G. Truxal and Francis E. Merrill (1953)

<u>Changing functions</u>	<u>Continuing functions</u>
1. Economic	1. Biological
2. Educational	2. Affectional
3. Recreational	3. Status
4. Religious	4. Socialization
5. Protective	

Mollie Smart and Laura Smart (1976)

1. Sex	6. Love and affection
2. Education	7. Reproduction
3. Religion	8. Childrearing
4. Recreation	9. Consumption
5. Production	10. Status giving

From a synthesis of the numerous lists of family functions presented in the literature, the following group was derived:

Sexual	Psychological and physical security
Status-giving	Socialization
Social control	Personalization
Economic	Life-long companionship
Nurturant	Recreational
Inheritance	Religious
Educative	Reproductive
Residence	Protective
Adaptive	Placement

This list was cumbersome, too long and redundant to be used in this study as the basis for an empirical test. The eight functions as identified by Reichert (1978) were the most suitable and appropriate for this study. They have been presented in this chapter along with the specific functions identified by various other theorists. Following is a discussion of the Reichert Model itself.

The Reichert Model of Eight Universal Family Functions

An empirical analysis of family functions was carried out based on the Reichert (1978) Model of Eight Universal Family Functions.

Reichert's list of functions was a synthesis of the lists of the writers referred to earlier. His position is that:

1. The family performs a number of major functions.
2. The way in which the family performs these functions will determine what type of personality develops in the growing individual.
3. The concept of universality implies that these functions of the family have existed throughout time and across geographical areas.
4. These functions create the bonds that hold families together.

Reichert's functions are grouped under three, broad categories according to the major outcomes they produce in human development: (1) maintenance functions, (2) developmental functions, and (3) maintenance/developmental function. An outline of this model follows, with brief references to elements that exist within each function.

I. Maintenance Functions

- A. The Reproductive Function, which involves
 1. Replacement of members
 2. Gratification of biological sex needs
- B. The Economic Function, which involves
 1. Efficient achievement of material needs
 2. Division of labor according to abilities
- C. Protective Function, which involves
 1. Physical protection of members

- a. Development of a system of rules
- b. Enforcement of rules

2. Social control

II. Developmental Functions

- A. The Nurturant Function (leads to emotional becoming), which involves

- 1. Emotional gratification
- 2. Tension management
- 3. Therapy

- B. The Philosophical Function (leads to moral becoming), which involves

- 1. Values
- 2. Ethics
- 3. Morals

- C. The Socialization Function (leads to social becoming), which involves

Rights and responsibilities regarding interactions with others

- D. The Education Function (leads to cognitive becoming), which involves

- 1. Acquisition of cognitive skills (Ex., language development)
- 2. Conditioned aspects of personality

III. Maintenance/Developmental Function

The Personalization Function (leads to idiosyncratic becoming), which involves

- 1. Body structure
 - a. Biological influences
 - b. Chemical influences
 - c. Genetic influences
 - (1) Cognitive inheritance
 - (2) Emotional inheritance
 - (3) Motor inheritance

2. Body function

- a. Biological influences
- b. Chemical influences
- c. Genetic influences
 - (1) Cognitive inheritance
 - (2) Emotional inheritance
 - (3) Motor inheritance

Explanation of the Model

The eight universal family functions described by Reichert were synthesized from his examination of the positions of the leading family functions theorists. Taking the position that family functions lead to human development, he states:

These functions are grouped under three broad categories according to the major outcomes they produce in human development: (a) maintenance functions, (b) developmental functions, and (c) maintenance/developmental function. (p. 3)

The maintenance functions include the following: reproductive, economic, and protective. Whereas the reproductive function encompasses basically the replacement of members and the gratification of biological sex needs, it also includes responsible reproduction, sexual regulation, childbearing, and reproduction of legitimate offspring.

Cooperative production of material goods or economic cooperation; efficient use of land, labor, and capital; cooperative effort toward material security; and division of labor according to abilities, sex, and age all lead toward an efficient achievement of material needs which fulfill the economic function.

The protective function consists of the physical protection of members through the development and enforcement of a system of rules. Included are political organization, governmental structure,

social control, policing, fighting, governing, protecting, and regulation of interaction within and between families.

Four functions are grouped under the heading of developmental functions which lead to emotional, moral, social and cognitive becoming. They are the nurturant, the philosophical, the socialization, and the education functions. Forming a part of the nurturant function are elements such as recreation, psychological loving, playing, emotional gratification, affectional interaction, stabilization of personalities, tension management, emotional release, therapy, and emotional security.

The philosophical function involves worshiping, ethics, values, mores, morals, religious beliefs, dealing with the unknown, relating to the supernatural, and dealing with the unmanageable.

The socialization function with its rights and responsibilities regarding interaction with others involves social placement, status-giving, position conferring, identification of who you are and what you are, and it refers to adults as well as to children.

The next function in the group of developmental functions is the education function, which encompasses the acquisition of cognitive skills and conditioned aspects of personality.

The personalization function is the eighth function, and it involves body structure and function. These encompass biological, chemical, and genetic influences. Reichert's final function also embodies cognitive, emotional and motor inheritance which leads to idiosyncratic, commonly known as individual, becoming.

Purpose of the Study

The review of literature has revealed that the concepts of family functions has been rationally developed. This rational approach has enabled definitions to be developed which enable a more objective, analytic study of the family. The empirical study of family functions will ultimately lead toward a more scientific position from which to view families.

It was, therefore, the purpose of this study to give an empirical test to the existence of family functions. Since the Reichert Model is a synthesis of the structure-functional approach of viewing families, that model was used as a reference point. The study hopes to bring some order out of the chaos which the hypothetically based classification system of family functions presents.

In order to develop this empirical base, a factor analysis was performed on a number of family activities and services in order to see if clusters of activities and services would emerge which are comparable to the rational model that has developed over the years.

Hypotheses

The hypotheses by which the purpose of the study was achieved were as follows:

1. The factor analysis will produce eight optimal clusters of activities and services.

2. The clusters produced will contain family activities and services which correspond to the family functions Reichert defined as: Reproductive, Economic, Protective, Nurturant, Philosophical, Socialization, Education, and Personalization.

CHAPTER III

METHODOLOGY

This chapter discusses the:

1. Basic design for testing the hypotheses of the study
2. Development of the instrument
3. Characteristics of the population and sample
4. Procedures of data gathering
5. Statistical techniques for analyzing the data

Research Design

This was a correlational study, the purpose of which was to test the hypotheses that:

1. The factor analysis will produce eight optimal clusters of activities and services.

2. The clusters produced will contain family activities and services which correspond to the family functions Reichert defined as: Reproductive, Economic, Protective, Nurturant, Philosophical, Socialization, Education, and Personalization.

Factor analysis was used for this study to obtain a clustering of variables in order to render an interpretation of the data.

The major purpose of factor analysis is to examine relations between the columns (variables) to test for, or discover, clusters of variables. Each such cluster consists of variables

that tend to measure the same thing and to measure something different from what is measured by other clusters. (Nunnally, 1967, p. 372)

The variables involved in the study were the services and activities in which the family engages, and these clustered into what were called functions. Eight functions of the family were sought, and factor analysis was used to identify how different family activities were related to each other. A major question was whether these activities and services would arrange themselves into eight clusters as suggested by Reichert.

Two important sampling goals were considered for this study. The sample was to be large, and it was to be a representative, non-probability, purposive sample. This led to 507 high school seniors being chosen from high schools in Berrien Springs, Buchanan, Eau Claire, and Niles, in southwest Michigan, and in Chicago, Illinois. The selection of high school seniors enabled representative responses to be obtained from a wide range of different types of homes, and avoided sampling difficulties that would have been experienced in random house-to-house interviews.

Development of the Instrument

Since the purpose of this study was to give an empirical test to the theory that there are eight family functions as hypothesized by Reichert (1978), it was necessary to design an instrument to assess the activities and services in which the family engages.

Classification of Activities

The study defined family functions in terms of services and activities. An instrument was needed which would list some of the

services and activities subsumed within the eight functions under consideration. Accordingly, the writings of several family theorists were consulted to help in compiling and classifying family activities. The explanations and definitions which they gave to their lists of family functions offered suggestions for the wording and classification of the family activities. Various family attitude, value, and self-esteem scales provided additional help in the formulation of a list of family activities and services.

Items were taken and modified from scales measuring social-psychological attitudes compiled by Shaw and Wright (1967) and by Robinson and Shaver (1969). Specific items used are given in appendix A.

The items thus generated were incorporated into a 295-activities and services Family Functions Classification Form (see appendix B). This form was submitted to a panel of five judges who examined them for content validity. For this study, content validity means that each item is expected to represent adequately its respective function. Included in the panel were one psychologist, one family studies expert, one sociologist, one educator, and one undergraduate psychology major. The panel was to judge whether or not the activities were indicators of family functions. They assigned each item to a family function and eliminated any activities which they felt did not fit any category listed. Ambiguous and redundant items and functions were discarded.

The preliminary screening by the judges was employed to eliminate any irrelevant items and to suggest any that might be pertinent. This screening also helped to reduce the length of the scale. Some of the statements were reworded by the researcher. The number of items was reduced to eighty.

A second panel of judges consisting of one psychologist, one family studies expert, one sociologists, one social worker, and one housewife examined these remaining eighty items for content validity and assigned them to eight family functions.

The purpose of the listing of the 295 items (see appendix B) was to create a large file of items from which the best items possible could be selected to go into the construction of an appropriate instrument. This long list was reduced by the two separate panels of judges to a final list of forty activities and services.

Designated Activities and Services

Each one of the forty activities and services had been designated to one of the eight family functions. As a result of the work of the two panels of judges and the researcher, a list of five related activities and services for each of the eight functions was prepared. The resulting list of functions and their related activities and services are as follows:

Reproductive

1. Recognize childbearing to be part of family living
2. Believe that parents should have only as many children as they can raise properly

3. Feel that childbearing should not take place out of wedlock.

4. Believe that "blood is thicker than water." (Blood relatives are closer than non-blood relatives)

5. Feel the importance of having children to maintain the family line

Economic

1. Obtain our income through employment
2. Get financial assistance from the government
3. Share economic responsibilities
4. Share in the performance of each other's duties
5. Give financial support to family members

Protective

1. Defend the family from outside forces
2. Make rules and regulations governing family members
3. Show disapproval when members break family rules
4. Provide physical protection for family members
5. Help members to abide by family rules

Nurturant

1. Demonstrate love to each other
2. Help each other to feel that we have accomplished and achieved
3. Make family members feel wanted, secure, worthwhile
4. Care for members when they are sick
5. Comfort members for whom things are going badly

Philosophical

1. Recognize that some events do not have scientific explanations for them
2. Stress the Golden Rule
3. Teach children the difference between right and wrong
4. Read the Bible for solutions to daily problems
5. Believe that man has a special purpose for being

Socialization

1. Participate in clubs and community activities
2. Make family members aware of their cultural heritage
3. Act in a way which meets community approval
4. Teach the children how to live and work with people outside the family
5. Encourage independence

Education

1. Help each other in gaining useful skills
2. Teach language skills to the children
3. Use educational books
4. Consider the home to be the child's first school
5. Recognize that learning is a lifelong process

Personalization

1. Accept inherited differences in family members
2. Notice similarities in the facial features and body build of family members
3. Notice differences in the facial features and body build of family members

4. Accept evidence of emotional expressions that are due to inherited tendencies

5. Recognize the inherited differences in physical skills of individual members

These activities and services were incorporated into a Family Functions Scale (see appendix C).

Assumption

The assumption was made that the forty activities and services which were incorporated into the Family Functions Scale were elements of all the possible functions of the family. It may be that other activities and services which indicated other family functions were not included. If this be the case, a bias could have been introduced into the design which would possibly prevent the identification of additional family functions.

Characteristics of the Instrument

The Family Functions Scale (FFS) consists of three pages. The first page, the interview form, provides for demographic data. The last two pages consist of the instructions and the forty items or statements concerning what the family does. A five-point Likert scale from "never" to "all the time" accompanies the statements. The respondent is to read each statement preceding it with "In our family we:" and mark one number from 1 to 5 according to how he/she understands his/her family's engaging in the activity and service stated. For the responses the following scale is used:

1. Never
2. Sometimes
3. Often
4. Very often
5. All the time

The Family Functions Scale was designed to be brief, simple, and easy to administer. Spanier's (1976) factor analytic study was used as a guide to the procedures in the construction of the Family Functions Scale. His study presented detailed procedures in the development of a 32-item Dyadic Adjustment Scale. The Spanier scale assessed the "quality of marriage and similar dyads" (p. 15). The final form was a 32-item scale which could be used to measure both married and unmarried couples.

Despite widespread criticisms of the concept of adjustment, the study proceeds from the pragmatic position that a new measure, which is theoretically grounded, relevant, valid, and highly reliable, is necessary since marital and dyadic adjustment continue to be researched.

This factor analytic study tests a conceptual definition set forth in earlier work and suggests the existence of four empirically verified components of dyadic adjustment which can be used as subscales (dyadic satisfaction, dyadic cohesion, dyadic consensus, and affectional expression). (p. 15)

Pilot Studies

For the purpose of refining the research design and to establish the reliability of the instruments, three pilot studies were conducted. There were six participants in the first pilot study. The second pilot study was composed of twenty-three persons. Twenty-five individuals participated in the third pilot study.

The respondents who participated in these three pilot studies were representative of the population being studied. The first two pilot studies provided information about the length of time needed to complete the questionnaire, and about the appropriate procedures for the administration of the instrument.

The least amount of time taken by any individual in the pilot studies was five minutes. The maximum time registered for any individual was nine minutes. No group among the three pilot studies took more than twenty-two minutes to complete the instrument. This time included giving the introduction and oral instructions for completing the interview form as well as the passing out and the collecting of the completed scales.

The first two pilot studies were very helpful in making appropriate changes in the wording of some of the items and in making adjustments in the emphases of certain points in the interview section.

The examiner asked the following questions of the persons in the first pilot study:

1. Did you have any reservations about taking the test?
2. Was there anything you didn't understand?
3. Was there anything additional that you felt could have been added?
4. Do you have any questions about anything concerning the test?
5. Did you find anything embarrassing for you to answer?

6. Were the instructions stated clearly enough for you to understand them?

7. Is there any comment you would like to make about the instrument?

The six individuals in the first pilot study answered "no" to the first six questions. Two of them in response to question number seven commented that certain statements on the scale might be worded a little differently. The comments about the scale were recorded so that reference could be made to them later should the same comments be noted during the second pilot study.

The twenty-three participants in the second pilot study were not asked for their reactions to the scale, but their questions concerning any statements were answered. Comments made about statements on the scale during the two pilot studies were reviewed. Ambiguous and unclear statements were modified or amended before the scale was administered to the third pilot study group.

The third pilot study of twenty-five respondents was used to assess the effectiveness of changes made as the result of the first two pilot studies and to employ the data obtained for preliminary analysis purposes. During the administration of the FFS to the third pilot group no questions were raised by any of the participants concerning any statement on the instrument. A trial run of the computer program was conducted with this data in order to refine the computer procedures.

Item Analysis

An item analysis was done with the pilot data, and a reliability coefficient alpha of .9427 was obtained. This gave an estimate of the reliability of the scale. Coefficient alpha is an index of internal consistency. Internal consistency refers to the degree to which the items on a scale measure the same attribute, or, in the case of the Family Functions Scale the same function. "The magnitude of alpha should increase as the intercorrelation among items within a scale increase" (Cox, Costanzo, & Coie, 1976, p. 904).

There were two items which yielded a point multiserial correlation of less than .3. They were Item 4 (see table 16), which yielded a point multiserial correlation (PMS) of .1844, and Item 34 (see table 13), which yielded a point multiserial correlation of -.1049. Both items were retained in the instrument because of the nature of the items. Both concern the economic function of the family: "Give financial support to family members (Item 4)" and "Get financial assistance from the government (Item 34)." Both items were also important to what the researcher was seeking to find out.

The computer item analysis completed the refinement of the Family Functions Scale which contained forty items (see appendix C).

Population and Sample

The 507 persons who participated in the study were seniors selected from two parochial schools and four public high schools in

Illinois and southwest Michigan. The respondents represented families living in communities located in the following types of regions:

1. Metropolitan
2. Urban
3. Semi-urban
4. Semi-industrial
5. Collegiate
6. Agricultural

The total number of males differed by a frequency of 24.5 less than the theoretical (expected) frequency of males in the total sample, whereas the frequency of females differed by 24.5 more than the theoretical number of females in the sample. Table 1 gives the actual numbers of males and females.

TABLE 1
DISTRIBUTION BY SEX

Sex	Observed Frequency	Theoretical Frequency	Difference
Males	227	251.5	24.5
Females	276	251.5	24.5
Total Sample	503	503	

Five percent of the sample represented families with nine or more children. There were fifteen children in the largest family in the sample. Families with three or more children made up 80 percent of the sample.

Four of the 507 returns of the Family Functions Scale had to be discarded for reasons of inadequate responses, inappropriate remarks, and gross incompleteness, which rendered them unusable. The total usable sample contained 503 respondents from the following schools: Andrews Academy, Berrien Springs High School, Buchanan High School, Eau Claire High School, Niles High School, and Shiloh Academy. Table 2 shows the number of respondents from each school.

TABLE 2
RESPONDENTS PER SCHOOL

School	Number
Andrews Academy	76
Berrien Springs High School	59
Buchanan High School	125
Eau Claire High School	101
Niles High School	121
Shiloh Academy	21
Total	503

Andrews Academy is a secondary school located on the campus of Andrews University. Andrews Academy and Berrien Springs High School are both located in Berrien Springs, a rural-suburban, collegiate community. Buchanan High School is located in Buchanan, a semi-industrial, agricultural community. Eau Claire, the location of Eau Claire High School, is an agricultural, light-industrial community. The city of Niles, where Niles High School is located, is an urban, semi-industrial community. Shiloh Academy is a secondary school located on the southeast side of the Chicago metropolitan

area. It is composed primarily of students from middle-class families.

Data Gathering Procedures

The principals of the participating high schools were approached personally by the examiner. They were presented a letter of introduction from Andrews University (see appendix D). The purpose of the study was explained to them in detail, and their support in the study was obtained.

A date was set for administering the instrument in each school. The place of administration was also decided upon, and the names of those who would be helping the administrator were also obtained. At each location the principal or the assistant principal requested a copy of the results.

The Family Functions Scale was administered in the individual classrooms except on the two occasions when it was administered in the school auditorium because of the large size of the group. The regular teachers of the particular groups in five schools and two guidance counselors in one school assisted the researcher in the passing out and the collecting of the instruments. An assistant principal at one school and the classroom teacher at another school were authorized to administer the Family Functions Scale themselves. Prior to these two occasions, a training session on how to administer the scale was given by the researcher to the assistant principal and the classroom teacher. A copy of the introduction and oral instructions (see appendix E) was supplied the two authorized persons.

Not more than one school per day was scheduled for examination because of the class schedules of the seniors. The classes which generally had all seniors were the government classes, and they were scheduled in the mornings. The examiner remained with each group until the last paper was turned in. The entire population at each high school was set as the goal for the sample size. In actuality, all those seniors available on the date agreed upon for the administration of the scale constituted the sample size at that particular school.

Data Analysis

The responses of the family members to the activities are given in table 19, appendix F. The data were submitted to factor analyses with varimax rotation to obtain an optimum number of factors. After the factors were extracted, the cluster of items for each factor was interpreted for the purpose of testing the hypotheses.

According to Child (1970), factor analysis is a device for ordering and simplifying correlations between related variables. Also, it is a means for testing and creating hypotheses.

CHAPTER IV

PRESENTATION AND DISCUSSION OF THE FINDINGS

This chapter presents a discussion of the statistical treatment, an analysis and summary of the data, and a discussion of the findings.

Discussion of the Statistical Treatment

The individual scores, as given in table 19, appendix F were submitted to factor analyses followed by eight different rotations (see tables 20-27, appendix G). The purpose of submitting the scores to various rotations was to determine which rotation provided the most meaningfully interpretable clusters of family activities and services. The smallest number of factors rotated was four, and the largest number was twenty-two. Table 3 presents a listing of the twenty-two different possible factors that could be extracted with their respective eigenvalues and proportions of total variances.

To help facilitate the selection of the optimum number of factors for this study, each variable and each cluster of variables for each rotation of factors were subjected to five criteria. According to the statistical literature, these are the criteria which are to be considered in explaining a "configuration of variables" (Cattell, 1966, p. 184). They are as follows:

1. All factors in each analysis have an eigenvalue of 1.00 or above.

The sum of squares of the loadings at the bottom of each factor is technically known as the latent root (or alternatives such as eigenvalue, extracted variance and sum of squares). Latent root and eigenvalue are expressions taken from matrix algebra. (Childs, 1970, p. 42)

This criterion was used as a means for deciding on the number of factors to be extracted. The technique, known as Kaiser's criterion, is presented by Child (1970). "Only the factors having latent roots greater than one are considered as common factors." It is suggested that "Kaiser's criterion is probably most reliable when the number of variables is between 20 and 50" (p. 43).

2. Every variable meets the criterion of $\pm .36$ or above.

The correlation coefficient (factor loading) for this study was $\pm .36$. Child states that

in deriving the factor loadings, it became evident that they were, in effect, correlation coefficients. For the purposes of specifying an acceptable level of significance the loadings could be treated in a similar fashion to correlation coefficients. (p. 45)

In accordance with current practice (Child, 1970, p. 62), the criterion of $\pm .36$ was arbitrarily set by the researcher.

3. Simple structure. Simple structure is reached "when each factor has loadings extending over (affecting) only a few variables, i.e., it loads or correlates with the smallest possible number" (Cattell, 1966, p. 184). Simple structure, or at least an approximation to simple structure is a desirable condition in factor analysis. According to Bennett and Bowers (1976). "Rotation to approximate simple structure aids in the interpretation of factors" (p. 31).

TABLE 3

EIGENVALUES AND TOTAL VARIANCE

Factors	Eigenvalues	Cumulative Proportion of Total Variance
1	10.88920	.27223
2	1.85313	.31856
3	1.64974	.35980
4	1.49339	.39714
5	1.38906	.43186
6	1.23260	.46268
7	1.14203	.49123
8	1.10892	.51895
9	1.05870	.54542
10	.97847	.56988
11	.09032	.59261
12	.89595	.61501
13	.87351	.63685
14	.83701	.65777
15	.80007	.67778
16	.76157	.69682
17	.74923	.71555
18	.71873	.73351
19	.68495	.75064
20	.67906	.76761
21	.67369	.78446
22	.64648	.80062

The opposite of simple structure is complex structure.

"Rotation to achieve simple structure is a fairly objective way to achieve variable simplicity or to reduce variable complexity"

(Kerlinger, 1973, p. 673).

4. No unique variance. Unique variance occurs where there is no clustering of variables with high loadings (correlation coefficient of $\pm .36$ or above) on a factor. This is the condition in which the variance is unique to one variable and is not explained by other variables; or if the variance is shared, the sharing is negligible (Bennett and Bowers, 1976, p. 31). Unique variance is an undesirable condition. The opposite of unique variance is common or shared variance which is accounted for by more than one variable.

5. Every cluster of variables facilitates a meaningful interpretation. This is a decisive criterion. Unless every cluster lends itself to a meaningful interpretation, no name can be given to the factors.

The above five criteria were used to determine which extraction of factors would best serve in testing the hypotheses. The extent to which the factor analyses met the criteria is presented in tables 4-8. There were thirty-seven of the forty variables which had high loadings on one factor alone for the twenty-two factor rotation. Only three variables had high loadings on more than one factor. This rotation most nearly approximated a simple structure.

Rotation to simple structure was nearly achieved for the rotations of eight and twelve factors. Seven variables for the twelve-factor rotation and eight variables for the eight-factor rotation had high loadings on more than one factor. However,

thirty-three variables for the twelve-factor rotation and thirty-two variables for the eight-factor rotation contributed to the approximation of simple structure for these rotations.

Only the two rotations of nine factors and twenty-two factors evidenced unique variances. All of the other analyses showed shared variances. See tables 20-27, appendix G for a presentation of all the rotated factor loadings.

TABLE 4

CRITERION 1--ALL FACTORS HAVE AN
EIGENVALUE OF 1.00 OR MORE

Number of Factors Rotated	Results
4, 6, 7, 8, 9	All of these rotations met this criterion.
10, 12, 22	These rotations did not qualify.

TABLE 5

CRITERION 2--EVERY VARIABLE HAS A
CRITERION OF $\pm .36$ OR ABOVE

Number of Factors Rotated	Results
4	Two variables did not qualify.
6	Two variables below $\pm .36$ failed to qualify.
7	One variable did not meet this criterion.
9	Two variables failed to quality.
10	Two variables did not meet criterion 2.
22	One variable below $\pm .36$ failed to qualify.
	<u>Rotations below met criterion 2</u>
8	Every variable had a criterion of $\pm .36$ or above. Qualified.
12	Every variable had a criterion of $\pm .36$ or above. Qualified.

TABLE 6
CRITERION 3—SIMPLE STRUCTURES

Number of Factors Rotated	Results
4	This four-factor rotation did not meet criterion 3. There are thirteen variables that have high loadings on more than one factor.
6	There are seventeen variables which have high loadings on more than one factor for six rotations. Criterion 3 is not met by the six-factor rotations.
7	This seven-factor rotation approaches meeting criterion 3. It has ten cases where one variable has high loadings on more than one factor. However, it still does not have a simple structure.
8	With just eight variables having high loadings on more than one factor, this eight-factor rotation approaches a simple structure. However, it still does not fully meet criterion 3.
9	Nine cases where one variable has high loadings on more than one factor place this nine-factor rotation within reach of meeting criterion 3. It, however, still does not attain a condition of simple structure.
10	This ten-factor rotation has twelve cases of variables with high loadings on more than one factor across the ten factors. This rotation does not meet criterion 3.
12	There are just seven variables which have high loadings on more than one factor for this twelve-factor rotation. This rotation approaches meeting this criterion. However, it still does not have a simple structure.
22	This twenty-two-factor rotation has the least number of variables with high loadings on more than one factor across the twenty-two factors. It has only three cases of high loadings on more than one factor. This rotation most nearly meets criterion 3.

TABLE 7

CRITERION 4--NO UNIQUE VARIANCES

Number of Factors Rotated	Results
4	No factors in this rotation present a high loading of only one variable. Therefore, this rotation meets criterion 4.
6	This rotation did not yield any condition of unique variances. This rotation meets criterion 4.
7	All of the factors of this seven-factor rotation exhibited shared variance. This factor fulfilled the requirement for criterion 4.
8	This eight-factor rotation had no conditions of unique variance. Every factor had more than one variable sharing the variance. This rotation fully meets this criterion.
9	One factor displayed a high loading of only one variable across nine factors. The requirement of criterion 4 is not satisfied.
10	The ten-factor rotations met criterion 4. There were no factors with only one variable with a high loading.
12	Twelve-factor rotations presented across all factors evidences of shared variance. Criterion 4 is met for this number of factors.
22	This rotation failed to meet criterion 4. There are twelve instances in which the high loading of a single variable is registered alone on one factor. Each of these twelve factors has only one variable with a high loading.

TABLE 8

CRITERION 5--EVERY CLUSTER FACILITATES A
MEANINGFUL INTERPRETATION

Number of Factors Rotated	Results
4, 6, 7	Disqualified. Failed to meet criterion 5.
8	Fully qualified. Meets criterion 5.
9, 10	Disqualified. Did not meet criterion 5.
12	Failed to meet criterion 5 primarily because of the two-variable clusters on factors 6, 9, and 12.
22	Disqualified. Did not meet criterion 5.

The requirement that every item meet the criterion of $\pm .36$ or above was fulfilled by the rotation of eight and twelve factors. The rotation of 10, 12, and 22 factors did not meet criterion 1.

Table 3 shows that there were nine eigenvalues greater than 1.00. The rotation of eight factors yielded eigenvalues ranging from 10.89 to 1.11 and accounted for 52 percent of the total variance of the forty items. A comparison of all the items and their loadings for all the rotations indicated that eight factors seemed to approach a simple structure. The eight-factor rotation also emerged with no unique variance and every variable meeting the criterion of $\pm .36$ or above (see table 23, appendix G). It is the only rotation to qualify with every cluster facilitating a meaningful interpretation. Therefore, the extraction of eight factors satisfies the most criteria to serve in testing the hypotheses.

A summary of the criteria results is presented in table 9.

Analysis of the Data

Tables 10 through 17 present the items and their loadings on each of the eight factors. The items are listed according to their loadings in descending order of magnitude by absolute value. High item loadings on a factor mean a high correlation between the item and the factor. Observation of the items with the highest loadings and consideration of the unifying features held in common with the other items give a clue as to the identity by name of that factor. The eight universal family functions hypothesized by Reichert (1978) suggested the nomenclature pool for the eight derived factors.

Factor I

Table 10 gives the fourteen items clustered under Factor I. This large group of high loadings is preponderantly composed of statements related to how the family cares for its members and how it acts to maintain a close, interpersonal relationship. The high loadings indicate that this cluster of items significantly measure Factor I. Aspects of shielding members for the purpose of their being guided aright throughout life is implied. Included in the list are statements related to supplying needs of love, esteem, and tension management. The function that best summarizes all the items in Factor I is therefore called Nurturant.

TABLE 9
SUMMARY OF CRITERIA RESULTS

Rotations	All Factors Have an Eigenvalue of 1.00 or More	Every Variable Meets the Cri- terion of $\pm .36$	Simple Structures	No Unique Variance	Every Cluster Facilitates a Meaningful Interpretation
	1	2	3	4	5
4	*			*	
6	*			*	
7	*			*	
8	*	*	(near approx- imation)	*	*
9	*				
10				*	
12		*	(near approx- imation)	*	
22			(best approx- imation)		

* Meets this criterion

TABLE 10
ITEM LOADINGS ON FACTOR I
(NURTURANT)

Item Number	Item	Loadings
36	Make family members feel wanted, secure, worthwhile	.71176
26	Help each other to feel that we have accomplished and achieved	.68715
25	Demonstrate love to each other	.64846
21	Comfort members for whom things are going badly	.63170
17	Help each other in gaining useful skills	.62506
16	Teach the children how to live and work with people outside of the family	.62179
33	Care for members when they are sick	.58717
40	Teach children the difference between right and wrong	.51572
39	Defend the family from outside forces	.48876
22	Believe that man has a special purpose for being	.48681
11	Provide physical protection for family members	.45360
19	Recognize that learning is a lifelong process	.44168
27	Use educational books	.40314
13	Recognize childbearing to be part of family living	.36173

Factor II

The item loadings on this factor as shown in table 11 are substantially high as was encountered under Factor I. The loadings on the three items express that there is a high correlation between the items and Factor II. These three activities appear to cluster together on the basis that family members are concerned with each other and with the social awareness displayed by its members outside of the family as well as within it. "Accept inherited difference in family members," and "Encourage independence" appear to go hand in hand. This relationship shows that when a family accepts the inherited differences in its members, it expresses the genuineness of this acceptance by encouraging independence in its members. This factor is best characterized by the term Socialization.

TABLE 11
ITEM LOADINGS ON FACTOR II
(SOCIALIZATION)

Item Number	Item	Loadings
35	Accept inherited differences in family members	.54940
31	Encourage independence	.46580
32	Act in a way which meets community approval	.43970

Factor III

Five items loaded substantially on this factor (see table 12). They portray the family as engaged in a protective role by making and

enforcing rules and regulations and in helping members to abide by them. There seems to be a logical sequence in the concept of rules and regulations for the family. This cluster of activities implies that the family makes and adopts rules and regulations, then makes them binding on the members by showing disapproval when they are broken. However, the concept of reasonableness in rule setting and enforcement is suggested in that the family lends a hand in helping members abide by the regulations. "Do unto others as you would have them do unto you," which is the Golden Rule, is stressed by the families of the respondents in this study.

All of the five items imply a function which could be called Regulatory.

TABLE 12
ITEM LOADINGS ON FACTOR III
(REGULATORY)

Item Number	Item	Loadings
23	Show disapproval when members break family rules	.77724
24	Make rules and regulations governing the family	.76551
15	Feel that childbearing should not take place out of wedlock	.49743
12	Help members to abide by family rules	.48319
38	Stress the Golden Rule	.39773

Factor IV

The loadings on this factor are among the highest for any item on any factor. Note in table 13 that item 34 has a negative loading while item 18 is positive. They are opposite in concept. This may be logically interpreted to mean that obtaining one's income through employment is the major means of support by the families of the respondents in the sample.

Item 18 characterizes the family as provider of income by means of employment. Item 34 characterizes the family as receiving income by means other than employment. The families in this study, who are earning their income through employment, do not generally receive government assistance. They are financially independent and self-supportive. The name Self-Supportive thus seems appropriate for Factor IV.

TABLE 13
ITEM LOADINGS ON FACTOR IV
(SELF-SUPPORTIVE)

Item Number	Item	Loadings
34	Get financial assistance from the government	-.74800
18	Obtain our income through employment	.70523

Factor V

Table 14 shows that the four items that clustered under Factor V have high loadings. This indicates that these activities significantly measure Factor V. According to the respondents, their

families recognize inherited differences and accept inherited tendencies. It appears that families are to take into account the number of children that can be raised properly as being crucial to allowing for individuality. The grouping of items 8, 14, 10, and 9 suggests that families consider the individual becoming of its members. These items clustered in what can be termed Personalization.

TABLE 14
ITEM LOADINGS ON FACTOR V
(PERSONALIZATION)

Item Number	Item	Loadings
8	Believe that parents should have only as many children as they can raise properly	.64131
14	Accept evidence of emotional expressions that are due to inherited tendencies	.52135
10	Consider the home to be the child's first school	.48898
9	Recognize the inherited differences in physical skills of individual members	.42199

Factor VI

Items 3, 20, and 2 on Factor VI, shown in table 15, have substantial loadings. The inclusion of item 20, "Read the Bible for solutions to daily problems," on Factor VI provided the most meaningful interpretation in relation to the other two items. Apparently the respondents felt that their families engaged in this activity in a significant way. The item cluster for Factor VI suggests that families have a way of explaining and dealing with everyday problems,

dealing with the unknown, and helping their members to relate to their moral becoming. An appropriate name for this factor is therefore Philosophical.

TABLE 15
ITEM LOADINGS ON FACTOR VI
(PHILOSOPHICAL)

Item Number	Item	Loadings
3	Recognize that some events do not have scientific explanations for them	.62255
20	Read the Bible for solutions to daily problems	.44120
2	Teach language skills to children	.43158

Factor VII

Table 16 gives the distribution of items in Factor VII. Items 7, 4, and 1, "Share economic responsibilities," "Give financial support to family members," and "Share in the performance of each other's duties," had been designated by the two panels of judges and the researcher to be activities which indicate the economic function of the family.

Item 6 in this group apparently also carries some connotation of economic function as evidenced by its clustering with the other economic function variables. The respondents saw their families participating cooperatively in meeting the press of the economic needs which the family faces. The economic need is met and the family is maintained not only through an efficient division of labor

and shared responsibilities, but also through a wise budgeting of time to include participation in community activities. This service which the family performs can be called Sharing Resources.

TABLE 16
ITEM LOADINGS ON FACTOR VII
(SHARING RESOURCES)

Item Number	Item	Loadings
7	Share economic responsibilities	.69730
4	Give financial support to family members	.64643
6	Participate in clubs and community activities	.42875
1	Share in the performance of each other's duties	.40692

Factor VIII

The focus of the items for Factor VIII, as table 17 presents, is on what makes and perpetuates a family. The realization that there is nothing to compare with the closeness that exists between blood relatives and the cognizance of the differences and similarities produced in the offspring of a family constitutes a rational basis for the item cluster on this factor. These elements denote the function that the family fulfills in maintaining its cultural heritage and family line through childbearing and replacement of members. This factor is best characterized by the term Reproductive.

TABLE 17

ITEM LOADINGS ON FACTOR VIII
(REPRODUCTIVE)

Item Number	Item	Loadings
30	Believe that "blood is thicker than water" (Blood relatives are closer than non-blood relatives)	.69914
29	Make family members aware of their cultural heritage	.58774
28	Notice differences in the facial features and body build of family members	.58487
37	Notice similarities in the facial features and body build of family members	.52845
5	Feel the importance of having children to maintain the family line	.39718

Summary of the Data

A number of different factor analyses were performed to see if interpretable factors would emerge. Eight optimal factors emerged and were called:

1. Nurturant
2. Socialization
3. Self-Supportive
4. Regulatory
5. Personalization
6. Philosophical
7. Sharing Resources
8. Reproductive

The first derived factor, Nurturant, involves the care of the members of the family and how it acts to maintain a close, inter-personal relationship. The second factor, Socialization, combines three activities which portray the family as being concerned for its members, especially in terms of their growth towards mature behavior and social becoming. Factor three is entitled Regulatory, showing that the family helps its members abide by the rules and regulations which it makes and enforces. The fourth factor, Self-Supportive, depicts the family as being financially independent and generally economically self-supportive. Personalization as the fifth factor involves the sense of consideration for each member's body structure and function, his individual becoming. The sixth factor was Philosophical. This suggested the instilling of morals, values, and ethics. When the family members perform their individual duties in an efficient, cooperative way and carry their share of the responsibilities of the family, they are Sharing Resources. This is the seventh factor. The eighth factor is entitled Reproductive. New members are added to the family, and the family's cultural heritage is preserved as its members continue to "feel the importance of having children to maintain the family line."

Each of the eight derived factors contained clusters of activities and services performed by the family. They thus corresponded to eight possible functions of the family.

Discussion of the Findings

The purpose of the study was to give an empirical test to the eight hypothesized family functions as identified by Reichert

(1978). In order to achieve this, the factor analysis technique was used. The following is a discussion of the results of having empirically tested the hypotheses:

Hypothesis 1. The factor analysis will produce eight optimal clusters of activities and services.

A factor analysis followed by eight different rotations was performed on the data relative to Hypothesis 1. The eight different rotations were submitted to five basic criteria for the selection of the optimal number of factors. Hypothesis 1 was upheld. Eight factors emerged which met these criteria.

Hypothesis 2. The clusters produced will contain family activities and services which correspond to the family functions defined by Reichert as: Reproductive, Economic, Protective, Nurturant, Philosophical, Socialization, Education, and Personalization.

It was revealed that some of the clusters of activities and services yielded names corresponding to the functions as defined by Reichert, but others did not. Hypothesis 2 was therefore partially supported. The following are lists of family functions as defined by Reichert (1978) and as identified from the study:

<u>Reichert (1978)</u>		<u>From the Study</u>
Reproductive	--	Reproductive
Economic	--	Sharing Resources
		Self-Supportive

Protective	--	Regulatory
Nurturant	--	Nurturant
Philosophical	--	Philosophical
Socialization	--	Socialization
Education	--	(No specific factor emerged as Education)
Personalization	--	Personalization

The Education function as defined by Reichert did not emerge as a distinct function in this study. The five activities and services determined for the Economic function as defined by Reichert formed two separate clusters when submitted to factor analysis. These two separate clusters were given appropriate names while still retaining the concept of an Economic function. The empirically derived names were Self-Supportive and Sharing Resources.

The Protective function and the Regulatory function essentially correspond. The principal difference lies in the cluster of activities and services which the factors contain.

This present analysis of the data and the brief discussion of the findings suggest certain comparisons of selected activities and services which will be presented in the next chapter.

CHAPTER V

SUMMARY, IMPLICATIONS, SUGGESTIONS, AND RECOMMENDATIONS FOR FURTHER RESEARCH

This chapter consists of a summary of the major points of the study. It includes the implications of the study, suggestions for implementing the results, and recommendations for further research.

Summary of the Study

The purpose of this study was to give an empirical test to the Reichert (1978) hypothesis of eight family functions. The review of related literature included an extensive search through related materials dealing with family activities, services, and family functions.

Research concerning the concepts and attitudes of what constitutes the family furnished substantive help in compiling and classifying family activities. The contributions of such men as Murdock (1949), Ogburn and Nimkoff (1955, 1958), Reiss (1965), and Reichert (1978) provided a background for identifying and defining family functions and activities.

A thorough review was made of scales and measures of social-psychological attitudes compiled by Robinson and Shaver (1968). These, along with scales and measures constructed by other researchers provided models for use in the design of the Family

Functions Scale. The Reichert (1978) Eight Universal Family Functions Model supplied the central theoretical framework of the present study and provided the basis for the formulation of the two hypotheses:

1. The factor analysis will produce eight optimal clusters of activities and services.
2. The clusters produced will contain family activities and services which correspond to the family functions Reichert defined as: Reproductive, Economic, Protective, Nurturant, Philosophical, Socialization, Education, and Personalization.

A Family Functions Scale (FFS) was designed by the researcher and administered to 507 high school seniors in five cities in southwest Michigan and in one metropolitan city in Illinois. The responses of the seniors to the FFS were submitted to factor analysis to determine the optimum number of factors and the meaningfully interpretable clusterings of the test items on the factors. The extraction of eight factors emerged with the most acceptable arrangement and the most interpretable groupings.

The naming of each factor was determined by the common characteristics shared by the items clustered on each factor. The initial criterion for deciding upon the unifying characteristics was provided by the item or items with the highest loadings on each factor. According to the results of the findings, each factor received, wherever possible, one of the names of the family functions from the Reichert Model. Not all of these eight family function names were used. However, if the common characteristics of the items coincided with the name of the function from the Reichert Model, it

was used to designate the factor. In the case of three factors, other names were given. The term Protective was replaced by the term Regulatory function because it carries a broader concept and better fits the characteristics of Factor III. Factors IV and VII suggested duality in the Economic function. Each factor received its appropriate label. Factor IV was named Self-Supportive. Factor VII was named Sharing Resources. Table 18 gives a summary of the eight empirically derived factors.

The activities previously considered as activities of the Education function did not cluster together in the factor analysis. They were rather spread over a number of other factors. This suggests that the education of the family is fulfilled as an integral part of all the other functions. The education of the family throughout life goes on in everything that the family does.

Comparison of Designated Activities and Services with the Cluster of Items on Each Factor

The designated activities and services and their related functions were not always the same as the clusters which emerged from factor analysis. Following is a brief comparison of the groups as previously seen by the panels of judges and the researcher and as subsequently related according to the factor analysis.

Nurturant Function

The same five designated activities and services for the Nurturant function emerged on Factor I of the factor analysis. They were:

TABLE 18
SUMMARY OF THE EIGHT FACTORS

Factor	Title	Definition
I	Nurturant Function	A function that meets basic needs, both physical and emotional, whose prime goal is the stabilization of personalities. This function provides psychological support.
II	Socialization Function	A function that relates to the personality development of family members. Its goal is to guide family members to social becoming.
III	Regulatory Function	A function that includes the development and enforcement of a system of rules. Its aim is the protection of family members through regulatory means.
IV	Self-Supportive Function	A function that refers to financial arrangements for obtaining income. These arrangements are generally self-initiated, and income is obtained through employment. The prime goal of this function is the efficient achievement of material needs through self-supportive means.
V	Personalization Function	A function that encompasses inherited body structure and function, whose goal is to lead family members to experience individual becoming.
VI	Philosophical Function	A function that refers to ethics, morals, values, and worshiping. Its aim is to guide family members in dealing with the unmanageable and the unknown.
VII	Sharing Resources Function	A function that meets basic economic needs. It deals with the shared management of economic responsibilities and the judicious allocation of material assets.
VIII	Reproductive Function	A function that relates to the gratification of biological sex needs and the replacement of members. Its goal is the perpetuation of the family lineage.

1. Demonstrate love to each other
2. Help each other to feel that we have accomplished and achieved
3. Make family members feel wanted, secure, worthwhile
4. Care for members when they are sick
5. Comfort members for whom things are going badly.

The difference between the designated activities and services and those which emerged on Factor I lies in the nine other items which also clustered with the above five on Factor I of the factor analysis.

Among the other nine items, the following had been designated as indicators of the Education function:

1. Help each other in gaining useful skills
2. Recognize that learning is a lifelong process
3. Use educational books.

One item, "Teach the children how to live and work with people outside of the family," had been designated as an indicator of the Socialization function.

The following two had been designated as indicators of the Philosophical function:

1. Teach children the difference between right and wrong
2. Believe that man has a special purpose for being.

Two more items in the Factor I cluster had been designated as related to the Protective function:

1. Defend the family from outside forces
2. Provide physical protection for family members.

One item, "Recognize childbearing to be part of family

living," had been designated as related to the Reproductive function.

The cluster arrangement for Factor I of the above fourteen items suggests that the Nurturant function involves some of the activities and services of other family functions. The Nurturant function involves the demonstration of love to each other in the family, and the help given to each other to bring a sense of accomplishment and achievement, and a feeling of security, and of being worthwhile. It is active when teaching the children the difference between right and wrong, when teaching them how to live and work with other people outside of the family, and when defending them from outside forces.

Nurturance is also demonstrated in helping family members gain useful skills, in encouraging the use of educational books, and in the recognition that learning is a lifelong process. These activities primarily thought of as being a part of one's cognitive becoming, may also contribute to one's emotional becoming. That recognizing childbearing to be part of family living may also be an activity of nurturance is understood in light of the importance of accepting the children as an integral part of the family, as a natural consequence in the formation of the family.

Since the Nurturant function involves psychological loving, the stabilization of personalities, emotional release, therapy, and emotional security (Reichert, 1978), then the physical protection for family members may be related to nurturance. Knowing that they are physically protected and defended from outside forces helps to bring a sense of emotional security.

The belief that man has a special purpose for being also aids in the emotional becoming of the family members. The inspiration that this belief might give could serve as a stabilizing influence to comfort members of the family for whom things are going badly. Thus it is that the Nurturant function is very interrelated with the other functions of the family.

Socialization Function

The designated activities and services of the Socialization function that clustered on Factor II were the following:

1. Encourage independence
2. Act in a way which meets community approval.

The final item clustered on Factor II, "Accept inherited differences in family members," had been designated as an activity of the Personalization function. This suggests some relationship between Socialization and Personalization. Accepting differences in family members aids in the identification of who and what they are, a part of the Socialization function as defined by Reichert (1978).

Regulatory Function

The designated activities and services for the Protective function that clustered on Factor III--Regulatory function--were the following:

1. Make rules and regulations governing the family
2. Show disapproval when members break family rules
3. Help members to abide by family rules.

The item, "Feel that childbearing should not take place out of wedlock," designated for the Reproductive function, is also

included in this group on Factor III. The final item, "Stress the Golden Rule," in this cluster, had been assigned to the Philosophical function. The items in this cluster predominantly involved rules and regulations. Even the item concerning childbearing out of wedlock indicates a concept of control.

This group of activities and services suggest that the respondents considered their families as exercising some kind of regulation or control over its members even concerning legitimate births.

Control may also come through following the Golden Rule as family members provide for the development and enforcement of a system of rules. The Golden Rule can be fundamental to regulations of fighting, governing, policing, social control, and family interaction.

Regulatory seemed an appropriate name as a family function represented by the clusters of activities and services on Factor III.

Self-Supportive Function

The two items on Factor IV--Self-Supportive--had been designated for the Economic function. They are as follows:

1. Get financial assistance from the government
2. Obtain our income through employment.

These two activities and services persisted in correlating separately from the other three items which had been designated for the economic function.

It is significant that 13 percent of the families represented in this study (67 out of 503) acquired financial

assistance from the government from often to all the time. This may mean that they received aid ranging from educational grants to welfare assistance. On the other hand, 87 percent (436) of the 503 families represented in this study are financially independent. They obtain their income through employment.

Sharing Resources Function

The other three items which also conform to the description of the Economic function clustered under Factor VII--Sharing Resources function. They are as follows:

1. Share economic responsibilities
2. Give financial support to family members
3. Share in the performance of each other's duties.

The one item that was not assigned to the Economic function was "Participate in clubs and community activities." It had previously been designated as an indicator of the Socialization function. However, its clustering under Factor VII, suggests that it fits an Economic interpretation. The Sharing Resources function involves even an outreach into the community through the wise allocation of the family's time and the judicious apportioning of funds to worthy and beneficial community organizations. This is considered an activity of the Socialization function.

The term sharing stands out as the dominant concept for the group of activities and services clustered under Factor VII. The Economic function as identified by Reichert (1978), therefore, gives way to two separate, emerged groups. The nature of the activities

and services suggested the names Self-Supportive and Sharing Resources.

Personalization Function

The following items, both designated for the Personalization function, emerged under Factor V, the Personalization function.

1. Accept evidence of emotional expressions that are due to inherited tendencies
2. Recognize the inherited differences in physical skills of individual members.

The item, "Believe that parents should have only as many children as they can raise properly," formed part of the group of five activities and services for the Reproductive function as described by Reichert. The item, "Consider the home to be the child's first school," was an activity assigned to the Education function. Both of these items clustered under Factor V.

The four items which are clearly assigned to the Personalization function suggest that the rearing of the children of the family and the consideration of the home as the child's first school relate to the development of individuality in the members of the family. Individuality is seen as that which each member is not only entitled to, but is encouraged and helped to develop in becoming himself. He is to act as and be a unique person, different from and yet similar to others in many ways.

Philosophical Function

Two of the five items assigned to the Philosophical function

emerged on Factor VI--Philosophical function. They are the following:

1. Recognize that some events do not have scientific explanations for them
2. Read the Bible for solutions to daily problems. The final item on the factor, "Teach language skills to children," had been formerly assigned to the Education function.

The clustering of these three items on Factor VI suggests that the concept of the Philosophical function of the family involves morals, values, worshiping, and dealing with the unknown. It also involves the notion of teaching family members to be articulate in verbal expressions of these morals and values.

Reproductive Function

Two items which had been assigned to the Reproductive function emerged on Factor VIII--Reproductive function:

1. Believe that "blood is thicker than water" (Blood relatives are closer than non-blood relatives)
2. Feel the importance of having children to maintain the family line.

The other items in this cluster had been previously designated for the Socialization and the Personalization functions. They are:

1. Make family members aware of their cultural heritage (Socialization)
2. Notice differences in the facial features and body build of family members (Personalization)

3. Notice similarities in the facial features and body build of family members (Personalization).

The activities and services of this group are interpreted to mean that when a child is born into the family, its physical similarities and differences are compared to those of the rest of the family. There is, also, an orientation of the new member towards an awareness of his/her family's cultural heritage. From the point of view of feeling "the importance of having children to maintain the family line," and the orientation around the arrival of the new offspring, the designation of the Reproductive function to this cluster of activities is apropos.

Education Function

The following activities and services were designated for the Education function, but none emerged as a distinct cluster to form a separate factor which could be called the Education function.

1. Help each other in gaining useful skills
2. Teach language skills to the children
3. Use educational books
4. Consider the home to be the child's first school
5. Recognize that learning is a lifelong process.

The lack of a distinct cluster for an Education function suggests that the education of the family is fulfilled as an integral part of all the other functions. The education of the family throughout life goes on in everything that the family does.

Implications

Are radical changes in lifestyles threatening the existence of the family? Are the increasing advances in computer technology heralding the demise of the family? Are reports of increasing numbers of women leaving the home for paid work, the declining fertility rates, and rising divorce rates (Bane, 1976, p. xiv), portending the imminent decline of the family?

In answer to these and other questions about the future of the family, Margaret Mead, in a talk given at the University of Cincinnati, expressed that no matter to what extent lifestyles may change, the one institution that will never disappear is the family (Sammons, 1977, p. 73).

This study implies that what Dr. Mead said is true. The family is still viable, and there are a number of functions which the family still performs. Empirically, this study has determined that an optimum number of family functions is eight. Rather than disappearing, the family through the performance of its functions is still quite visible. Thus, as Bane (1976) has entitled her book, the family is Here to Stay.

The family is not diminishing. It is very much alive. The family is not dysfunctional but active. If the stability of the family is measured by the number of functions it performs, then the families represented in this study are quite stable. Turner (1970) states that "the stability of family life is enhanced by more intense bondedness and closer regulation when the functions performed by the family are many and varied" (p. 217).

This study further implies an interrelatedness of family

functions. It is possible that such an interrelationship could exist to the extent that separate functions are viewed as one fundamental function. Evidently, this was apparent to Saxton (1977) when he expressed that "the fundamental function of the family is to produce, nurture, and socialize offspring until they are able to survive by their own efforts" (p. 375).

According to the findings of this study, the Nurturant function interrelated with the other functions more than any other of the eight functions. It also was the function that most clearly emerged (see table 10). Careful examination of the activities (items) with acceptable loadings on this factor revealed that items characteristic of other functions such as Regulatory, Socialization, Philosophical, Education, and Reproductive were clustered under the Nurturant function. This implies that there is a function that is so pervasive that it acts as a binding force among the other functions of the family.

Perhaps, this function is as a central dimension which, when performed, creates a closer and more effective family. As Dyer (1975) puts it:

To express love in word and action, to keep commitments, to live up to priorities, to be constant and consistent in caring, to be available in time of need, to be sensitive, to forgive, to help, and finally to honestly give oneself must be the essence of nurturance. (p. vii)

The clear emergence of the first factor entitled Nurturant, followed closely by the grouping entitled Socialization, might also suggest the essential role of nurturant-socialization. Reiss (1965) appears to substantiate this implication when he says that all other

functions have been ruled out as unessential and that only the nurturant type of Socialization is the universal function of the family institution (pp. 447-449).

Factor analysis operates upon the respondents' answers thus regrouping them into a structure that oftentimes is not as was expected. From this restructuring it can be seen what items appeared to be related to each other from the respondents' point of view. The activities formerly thought to be characteristic of an Education function did not emerge as a cluster on a factor which could have been named the Education function. In this study, those activities resulted in being diffused throughout the other functions.

Thus, education did not appear as a distinct and separate function. It was absorbed into such functions as Nurturant, Personalization, and Philosophical. This suggests that the children in the family may not be aware that the family engages in any education activities. This could be due to the possibility that the activities related to education are being performed in an informal, incidental, or inobvious way.

The items which loaded substantially on the factor entitled the Regulatory (see table 12) function imply that the family still commands authority over its members. The results suggest that general control and discipline of family members have not been relinquished by the family into the hands of outside agencies. The placement of item 15, "Feel that childbearing should not take place out of wedlock," in the Regulatory function implies that, according to this study, the family retains control of the legitimate place of childbearing within the family.

Reproduction as a function of the family also clearly emerged from this study. This implies that the family continues to claim dominion over the setting in which procreation is to be exercised. Turner (1970) said that "Whatever permissiveness there may be regarding sex relations, bearing and rearing up children is a family activity" (p. 221).

According to the findings of this study, the Economic function of the family is such a dominant force that the exercise of it emphasizes a dual concept (see tables 13 and 16). This implies that an adequate performance of this function involves not only the getting of money through employment and the sharing in the management of it, but also a joint participation in all the activities of the family that concern economic expenditure and investment of time, effort, and money. "Money is a vital force in nearly every facet of man's life," states Saxton (1977). "Sound money management consists simply of allocating available funds in ways that maximize need fulfillment and minimize deprivation" (pp. 473, 477).

It is suggested that the budgetary arrangements or some kind of shared management of the economics of the family should involve the whole family. Saxton (1977) states that "discussions about the budget should ideally bring the family closer together as they share in money problems and their solutions" (p. 483).

Suggestions and Recommendations

Suggestions to Family Life Counselors, Marriage Counselors, Theorists, and Researchers

1. That the empirical results of this study and its

theoretical foundations be used to guide family and marriage counselors in therapy settings. Understanding that families that are not functional will dissolve and understanding the role of the functions in the family could help counselors in guiding their clients as they seek fulfillment within the family.

2. That the responses on the Family Functions Scale be used as a pivot point into basic family problems. Therapists could lead discussions into the area of family difficulty upon noting what activities on the scale were not responded to or which were scored low. The total scores of the client could be compared with the total possible points (200). The area in which the discrepancy lay could be noted.

3. That researchers and theorists define and research further what relationship there might be between what the family considers as important or non-important functions and the family's ability to function effectively.

Suggestions to Directors of Child and Family Workshops

1. That the Family Functions Scale be used as a diagnostic instrument to launch into dialogue concerning the family's perceptions of its functions. Couples could compare and discuss their awareness of the things that the family does. Strategies could be outlined to be followed so as to help family members perceive what the family functions are.

2. That the results of this study be used to focus on the functions families feel are the most important. The list of eight functions could be discussed. Parents and children under the

direction of the seminar leaders could exchange impressions of their perceptions of the activities of their families. Assessments could be made of which functions each member considers to be the most important.

Recommendations for Further Research

1. That the Reichert Model and the model developed from the study be synthesized into a stronger model of family functions. Such a model would bring together the strengths of a rationally derived model and a model that was empirically derived. It would give impetus to a stronger theory of the number of functions the family performs. It would provide a substantial basis for empirical studies concerning the universality of family functions.

2. That research be done to determine whether the eight functions of the family are universal, as hypothesized by Reichert. Inasmuch as this present study confirmed nearly all of Reichert's hypothesized family functions, there is the possibility that they are universal.

3. That a study be done involving only parents as respondents to the Family Functions Scale. This could entail securing a random sample or a nonprobability, purposive sample. When compared with the present study, the responses of the parents might reveal that they view the family differently in respect to family functions. The results might indicate the emergence of other functions.

4. That another family functions study be conducted with both parents and children of the same household. The value of such a study lies in the assessment of diversity or the commonality of

perception among family members concerning the activities of the family. These responses could be factor analyzed to see if perhaps the family as a unit understands and agrees upon the functions it performs.

5. That further study be done with seniors of parochial schools. The results might be compared with those of the present study, especially in the areas of Education and Philosophical functions. Perhaps the Education function will surface as a distinct and definite function. The Philosophical function might be revealed with greater emphasis in a study done in parochial schools. There is the likelihood that a restructuring of family functions will emerge different from the structuring which was obtained in the present study.

6. That a cross-cultural study of family functions be made. The purpose of this study would be to lay the groundwork for an assessment of the universality of family functions. Perhaps certain functions are universal while others of the eight functions determined by the present study are only specific to the locality.

7. That a study be done to determine the effectiveness of the Family Functions Scale to measure strengths of the family. It has been said that if families are not functional, they will dissolve. A study of a means to measure the strengths of families based on the performance of certain functions would be helpful to the cause of family cohesiveness.

Afterword

This study not only achieved its original purpose but went beyond in setting further goals to be reached. The construction of a

Family Functions Scale (FFS) proved useful in empirically testing the existence of eight optimum family functions. The study disclosed that the FFS is easy to administer, sans gêne, and that the scale reflects family behavior. It also sets the stage for further research into the vital area of family interaction.

This study did not purpose to address itself to the question of the universality of family functions. However, the possibility of an empirical testing of the universality of family functions is under consideration.

By no means is it implied that this study is a panacea for the baffling questions of family dissolution. Rather, it is one of many in a series of helps towards a better understanding of the dynamics of the family.

The family is at a crossroads. Will it secure its age-long claim as the most vital center of society, or will it relinquish its birthright and succumb to the pressures of outside agencies in a take-over of family functions? According to the present study, the answer is no, and especially so, if families would start preaching what they are practicing.

Irrespective of what limitations might be implied, the information gathered from the analysis of the responses of the participants in this study can serve as a helpful means towards further enlightenment concerning the maintenance and perpetuation of the integrity of the family. This information also serves as another significant contribution to the field of socio-psychological research.

A P P E N D I C E S

APPENDIX A
ITEMS FROM VARIOUS SCALES

ITEMS TAKEN AND MODIFIED FROM VARIOUS SCALES

Items were taken and modified from scales compiled by Robinson and Shaver (1969) in the following areas:

Measurement of Self-Esteem and Related Constructs

1. I feel that I'm a person of worth, at least on an equal plane with others .
2. All in all, I am inclined to feel that I am a failure.
3. I certainly feel useless at times.
4. My parents and I have a lot of fun together.
5. My parents expect too much of me.
6. My parents understand me (pp. 100-01; 129-29).

Alienation and Anomia

1. It's hardly fair to bring children into the world with the way things look for the future.
2. I often feel lonely (pp. 175, 196).

Authoritarianism, Dogmatism, and Related Measures

1. Parents are much too easy on their children nowadays.
2. At times I have very much wanted to leave home.
3. If children are told much about sex, they are likely to go too far in experimenting with it.
4. A child should not be allowed to talk back to his parents, or else he will lose respect for them.
5. A teen-ager should be allowed to decide most things for himself.
6. In making family decisions, parents ought to take the opinions of children into account.
7. It is important to teach the child as early as possible the manners and morals of his society.

8. A marriage should not be made unless the couple plans to have children (pp. 240; 297-98).

Religious Attitudes

1. How often, if at all, are table prayers or grace said before or after meals in your home?
2. I believe that the Bible provides basic moral principles to guide every decision of my daily life.
3. I enjoy working in the activities of the Church.
4. How often do you pray privately in places other than at church?
5. The most important idea in religion is the golden rule (pp. 561, 572-73, 587).

Also useful for items was the compilation by Shaw and Wright (1967) of scales measuring attitudes. The following scales and items were used:

A Survey of Opinions Regarding the Bringing Up of Children

1. Parents should take their children with them on trips and vacations.
2. Parents should encourage their children to bring their friends home and should help them to entertain their friends.
3. Parents should show their love and affection for their children **outwardly** by praise and expressions of affection (pp. 35, 36).

A Survey of Opinions Regarding the Discipline of Children

1. An older child should be expected to take care of younger brothers and sisters.
2. Parents should watch their young children to see that no harm comes to them.
3. A child should be allowed to spend his money or allowances as he wishes.
4. A child's liberty should be restricted in danger situations only (pp. 38,39).

Attitude Toward Parental Control of Children's Activities

1. Training in obedience to one's parents is fine preparation for later life for any young person.
2. Young people should be trained in obedience to their parents in regard to helping with the daily tasks about the home.
3. A young person of high school age should be free to come and go as he pleases without interference from his parents (pp. 47, 48).

Attitude Toward Birth Control

1. Birth control is a legitimate health measure.
2. Birth control is the only solution to many of our social problems (p. 135).

Familism Scale

1. Children below 18 should give almost all their earnings to their parents.
2. A person should always be expected to defend his family against outsiders even at the expense of his own personal safety.
3. The family should have the right to control the behavior of each of its members completely (p. 417).

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APPENDIX B

FAMILY FUNCTIONS CLASSIFICATION FORM

FAMILY FUNCTIONS CLASSIFICATION FORM

According to theory and research on the family, the following activities and services are related to family functions. I would appreciate your help in classifying these activities into the family function categories listed below. Write the number of the function in the box following each activity or service. If an activity or service fits two functions, choose only one—the one which you think it fits best.

If you think there are other activities not listed, please add them to the list on the lines provided at the end. Write 9 in the box if you feel that the activity does not fit any function category listed. Write 10 if you feel that it should be eliminated altogether. Thank you very much for your cooperation.

ACTIVITIES AND SERVICES

In our family we:

- | | | | |
|---|-----|--------------------------|-----------------------------|
| 1. Develop cultural interests. | 1. | <input type="checkbox"/> | |
| 2. Receive welfare assistance. | 2. | <input type="checkbox"/> | |
| 3. Obtain our income from full-time employment. | 3. | <input type="checkbox"/> | <u>FUNCTIONS</u> |
| 4. Encourage ambition in our members. | 4. | <input type="checkbox"/> | (1) Reproductive |
| 5. Pray at least once a day. | 5. | <input type="checkbox"/> | (2) Economic |
| 6. Go on vacations together. | 6. | <input type="checkbox"/> | (3) Protective |
| 7. Respect each others opinions and feeling. | 7. | <input type="checkbox"/> | (4) Nurturant |
| 8. Demonstrate love to each other. | 8. | <input type="checkbox"/> | (5) Philosophical |
| 9. Make rules and regulations governing each member of the family. | 9. | <input type="checkbox"/> | (6) Socialization |
| 10. Meet biological sex needs in a responsible way. | 10. | <input type="checkbox"/> | (7) Education |
| 11. Do the marketing for the family. | 11. | <input type="checkbox"/> | (8) Personalization |
| 12. Obtain our income from part-time employment. | 12. | <input type="checkbox"/> | (9) Fits no function listed |
| 13. Help each other to develop a personal, workable philosophy of life. | 13. | <input type="checkbox"/> | (10) Eliminate from list |
| 14. Guide in developing ethical standards. | 14. | <input type="checkbox"/> | |
| 15. Carry hospitalization insurance. | 15. | <input type="checkbox"/> | |
| 16. Have a short-term sexual partnership. | 16. | <input type="checkbox"/> | |
| 17. Talk over problems and discuss matters together. | 17. | <input type="checkbox"/> | |
| 18. Prefer to be away from home. | 18. | <input type="checkbox"/> | |
| 19. Provide for the development of each adult's personality. | 19. | <input type="checkbox"/> | |
| 20. Desire that each member demonstrate his ability. | 20. | <input type="checkbox"/> | |
| 21. Take turns planning household activities. | 21. | <input type="checkbox"/> | |
| 22. Receive financial aid from others. | 22. | <input type="checkbox"/> | |
| 23. Encourage in each member a concept of self-potential and ambition. | 23. | <input type="checkbox"/> | |
| 24. Use other people's property without permission. | 24. | <input type="checkbox"/> | |
| 25. Carry accident insurance. | 25. | <input type="checkbox"/> | |
| 26. Have a long-term sexual partnership. | 26. | <input type="checkbox"/> | |
| 27. Have hobbies that we engage in. | 27. | <input type="checkbox"/> | |
| 28. Enjoy working at home. | 28. | <input type="checkbox"/> | |

In our family we:

- | | | | |
|--|-----|--------------------------|-----------------------------|
| 29. Provide for the development of each child's personality. | 29. | <input type="checkbox"/> | |
| 30. Receive financial aid from the government. | 30. | <input type="checkbox"/> | |
| 31. Help each other to feel that we have accomplished and achieved. | 31. | <input type="checkbox"/> | |
| 32. Go on vacations together. | 32. | <input type="checkbox"/> | |
| 33. Respect teachers and school administrators. | 33. | <input type="checkbox"/> | |
| 34. Help develop conscience in the members. | 34. | <input type="checkbox"/> | |
| 35. Discuss the feeling that it is not fair to have children the way things are today. | 35. | <input type="checkbox"/> | |
| 36. Enforce the rules and regulations of our family. | 36. | <input type="checkbox"/> | |
| 37. Are devoted to each other. | 37. | <input type="checkbox"/> | (1) Reproductive |
| 38. Encourage independence. | 38. | <input type="checkbox"/> | (2) Economic |
| 39. Participate in clubs and community activities. | 39. | <input type="checkbox"/> | (3) Protective |
| 40. Receive assistance from the AFDC. | 40. | <input type="checkbox"/> | (4) Nurturant |
| 41. Promote the notion that education is to raise status, class, or social position. | 41. | <input type="checkbox"/> | (5) Philosophical |
| 42. Pray during the week. | 42. | <input type="checkbox"/> | (6) Socialization |
| 43. Encourage sterilization. | 43. | <input type="checkbox"/> | (7) Education |
| 44. Encourage working together as a family. | 44. | <input type="checkbox"/> | (8) Personalization |
| 45. Look out for the emotional stability of the family. | 45. | <input type="checkbox"/> | (9) Fits no function listed |
| 46. Shield the family from outside forces. | 46. | <input type="checkbox"/> | (10) Eliminate from list |
| 47. Make each member feel that he has a number of good qualities. | 47. | <input type="checkbox"/> | |
| 48. Discuss problems around the dinner table. | 48. | <input type="checkbox"/> | |
| 49. Obtain our income from self-employment business. | 49. | <input type="checkbox"/> | |
| 50. Provide books on music, arts, science, etc. | 50. | <input type="checkbox"/> | |
| 51. Pray during the day. | 51. | <input type="checkbox"/> | |
| 52. Use birth control. | 52. | <input type="checkbox"/> | |
| 53. Make each member feel wanted, secure, worthwhile. | 53. | <input type="checkbox"/> | |
| 54. Show sympathy and love whenever the occasion demands it. | 54. | <input type="checkbox"/> | |
| 55. Make each member feel that he is not a failure. | 55. | <input type="checkbox"/> | |
| 56. Let the children make their own decisions. | 56. | <input type="checkbox"/> | |
| 57. Cook, prepare, and serve meals for our family. | 57. | <input type="checkbox"/> | |
| 58. Discuss current events, politics, etc. | 58. | <input type="checkbox"/> | |
| 59. Have unusual religious experiences. | 59. | <input type="checkbox"/> | |
| 60. Have children in order to perpetuate the family. | 60. | <input type="checkbox"/> | |
| 61. Carry house insurance. | 61. | <input type="checkbox"/> | |
| 62. Respect each member of the family as a person of worth and dignity. | 62. | <input type="checkbox"/> | |

FUNCTIONS

- (1) Reproductive
- (2) Economic
- (3) Protective
- (4) Nurturant
- (5) Philosophical
- (6) Socialization
- (7) Education
- (8) Personalization
- (9) Fits no function listed
- (10) Eliminate from list

- | | | | |
|--|-----|--------------------------|-----------------------------|
| 63. Stay away from people because of fear. | 63. | <input type="checkbox"/> | |
| 64. Recognize each member as a unique individual | 64. | <input type="checkbox"/> | |
| 65. Help each other to acquire a sense of ability and usefulness. | 65. | <input type="checkbox"/> | |
| 66. Plan activities together. | 66. | <input type="checkbox"/> | |
| 67. Share economic responsibilities. | 67. | <input type="checkbox"/> | |
| 68. Do sewing for the family. | 68. | <input type="checkbox"/> | |
| 69. Save money regularly. | 69. | <input type="checkbox"/> | |
| 70. Say prayers before going to bed at night. | 70. | <input type="checkbox"/> | |
| 71. Understand what is expected of each member. | 71. | <input type="checkbox"/> | <u>FUNCTIONS</u> |
| 72. Discipline children by spanking or whipping. | 72. | <input type="checkbox"/> | (1) Reproductive |
| 73. Have sexual intercourse with the object of having children. | 73. | <input type="checkbox"/> | (2) Economic |
| 74. Work together to provide security for the members. | 74. | <input type="checkbox"/> | (3) Protective |
| 75. Comfort those members for whom things are going badly. | 75. | <input type="checkbox"/> | (4) Nurturant |
| 76. Try to have children. | 76. | <input type="checkbox"/> | (5) Philosophical |
| 77. Discipline children by taking away privileges. | 77. | <input type="checkbox"/> | (6) Socialization |
| 78. Make each member feel that he is useful. | 78. | <input type="checkbox"/> | (7) Education |
| 79. Hold family councils. | 79. | <input type="checkbox"/> | (8) Personalization |
| 80. Participate in family decisions. | 80. | <input type="checkbox"/> | (9) Fits no function listed |
| 81. Fix up and decorate our home. | 81. | <input type="checkbox"/> | (10) Eliminate from list |
| 82. Take care of housecleaning tasks. | 82. | <input type="checkbox"/> | |
| 83. Encourage each other to have a positive attitude concerning himself/herself. | 83. | <input type="checkbox"/> | |
| 84. Have unusual miracles happen in our family. | 84. | <input type="checkbox"/> | |
| 85. Seek amusement rather than go to church. | 85. | <input type="checkbox"/> | |
| 86. Accept children born out of wedlock. | 86. | <input type="checkbox"/> | |
| 87. Carry car insurance. | 87. | <input type="checkbox"/> | |
| 88. Help to make the home a warm, happy, protective place for each member. | 88. | <input type="checkbox"/> | |
| 89. Like to be with other family members. | 89. | <input type="checkbox"/> | |
| 90. Carry life insurance. | 90. | <input type="checkbox"/> | |
| 91. Help each member to feel proud of his cultural heritage. | 91. | <input type="checkbox"/> | |
| 92. Help each other in gaining useful skills. | 92. | <input type="checkbox"/> | |
| 93. Go to movies together. | 93. | <input type="checkbox"/> | |
| 94. Are satisfied with our jobs. | 94. | <input type="checkbox"/> | |
| 95. Get food stamp assistance. | 95. | <input type="checkbox"/> | |
| 96. Give financial support to each member. | 96. | <input type="checkbox"/> | |
| 97. Cooperate with school programs. | 97. | <input type="checkbox"/> | |
| 98. Go for automobile rides together. | 98. | <input type="checkbox"/> | |

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|---|------|--------------------------|
| 99. Participate in personal, private devotions. | 99. | <input type="checkbox"/> |
| 100. Encourage older siblings to care for younger ones. | 100. | <input type="checkbox"/> |
| 101. Provide a place to stay for each member. | 101. | <input type="checkbox"/> |
| 102. Watch TV together. | 102. | <input type="checkbox"/> |
| 103. Like to mix with other people outside the home. | 103. | <input type="checkbox"/> |
| 104. Make each member aware of his cultural heritage. | 104. | <input type="checkbox"/> |
| 105. Discuss the importance of each member in family. | 105. | <input type="checkbox"/> |
| 106. Lead members to be afraid of people. | 106. | <input type="checkbox"/> |
| 107. Supply food for each member. | 107. | <input type="checkbox"/> |
| 108. Show open affection before children. | 108. | <input type="checkbox"/> |
| 109. Practice strictness about sex matters. | 109. | <input type="checkbox"/> |
| 110. Follow one set of practices for rearing children. | 110. | <input type="checkbox"/> |
| 111. Help each other in gaining knowledge of himself and the world about him/her. | 111. | <input type="checkbox"/> |
| 112. Keep to ourselves. | 112. | <input type="checkbox"/> |
| 113. Read to each other. | 113. | <input type="checkbox"/> |
| 114. Are active in school and community endeavors. | 114. | <input type="checkbox"/> |
| 115. Have family worship together at home. | 115. | <input type="checkbox"/> |
| 116. Supply clothing for each member. | 116. | <input type="checkbox"/> |
| 117. Launder for our family. | 117. | <input type="checkbox"/> |
| 118. Take pride in accomplishments of each member. | 118. | <input type="checkbox"/> |
| 119. Approve of fighting. | 119. | <input type="checkbox"/> |
| 120. Get upset easily with children. | 120. | <input type="checkbox"/> |
| 121. Take care of members when they are sick. | 121. | <input type="checkbox"/> |
| 122. Take trips for enjoyment together. | 122. | <input type="checkbox"/> |
| 123. Allow outsiders to talk about family members. | 123. | <input type="checkbox"/> |
| 124. Act so as to obtain approval of others outside of the family. | 124. | <input type="checkbox"/> |
| 125. Smoke. | 125. | <input type="checkbox"/> |
| 126. Pay attention to religious matters. | 126. | <input type="checkbox"/> |
| 127. Memorize Bible passages. | 127. | <input type="checkbox"/> |
| 128. Accept others in home as part of the family. | 128. | <input type="checkbox"/> |
| 129. Depend upon each other. | 129. | <input type="checkbox"/> |
| 130. Reassure each other that he/she has much to be proud of. | 130. | <input type="checkbox"/> |
| 131. Have fun together. | 131. | <input type="checkbox"/> |
| 132. Discipline children by locking them in a room. | 132. | <input type="checkbox"/> |
| 133. Work together to give emotional stability for each family member. | 133. | <input type="checkbox"/> |
| 134. Have different standards in our family for raising children. | 134. | <input type="checkbox"/> |

FUNCTIONS

- (1) Reproductive
- (2) Economic
- (3) Protective
- (4) Nurturant
- (5) Philosophical
- (6) Socialization
- (7) Education
- (8) Personalization
- (9) Fits no function listed
- (10) Eliminate from list

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|---|------|--------------------------|-----------------------------|
| 135. Invent gadgets for fun. | 135. | <input type="checkbox"/> | |
| 136. Act so as to obtain the approval of each other. | 136. | <input type="checkbox"/> | |
| 137. Try to help our neighbors | 137. | <input type="checkbox"/> | |
| 138. Deny the existence of God. | 138. | <input type="checkbox"/> | |
| 139. Emphasize studiousness and importance of good grades. | 139. | <input type="checkbox"/> | |
| 140. Do original things. | 140. | <input type="checkbox"/> | |
| 141. Expect a lot out of children. | 141. | <input type="checkbox"/> | |
| 142. Try not to have children. | 142. | <input type="checkbox"/> | |
| 143. Make fun of people who get good grades. | 143. | <input type="checkbox"/> | <u>FUNCTIONS</u> |
| 144. Develop strong intellectual curiosity. | 144. | <input type="checkbox"/> | (1) Reproductive |
| 145. Help each other to feel self satisfaction about a job well done. | 145. | <input type="checkbox"/> | (2) Economic |
| 146. Discipline children by withholding affection. | 146. | <input type="checkbox"/> | (3) Protective |
| 147. Express anger openly. | 147. | <input type="checkbox"/> | (4) Hurtful |
| 148. Are consistent in handling the discipline | | <input type="checkbox"/> | (5) Philosophical |
| 149. Listen to each other's problems and plans. | 149. | <input type="checkbox"/> | (6) Socialization |
| 150. Discuss the fact that children are to make the home happy. | 150. | <input type="checkbox"/> | (7) Education |
| 151. Emphasize goal setting and values. | 151. | <input type="checkbox"/> | (8) Personalization |
| 152. Learn to behave properly in public. | 152. | <input type="checkbox"/> | (9) Fits no function listed |
| 153. Participate in church activities. | 153. | <input type="checkbox"/> | (10) Eliminate from list |
| 154. Invite visitors to our church. | 154. | <input type="checkbox"/> | |
| 155. Stress the Golden Rule. | 155. | <input type="checkbox"/> | |
| 156. Train the children in proper character development. | 156. | <input type="checkbox"/> | |
| 157. Help eliminate feelings of inferiority. | 157. | <input type="checkbox"/> | |
| 158. Help each other with various duties. | 158. | <input type="checkbox"/> | |
| 159. Give parties. | 159. | <input type="checkbox"/> | |
| 160. Try to have fewer children. | 160. | <input type="checkbox"/> | |
| 161. Share in the performance of each other's duties. | 161. | <input type="checkbox"/> | |
| 162. Feel responsible for each other. | 162. | <input type="checkbox"/> | |
| 163. Discipline children by restricting activities. | 163. | <input type="checkbox"/> | |
| 164. Are a serious family and do not joke or kid around. | 164. | <input type="checkbox"/> | |
| 165. Criticize each other. | 165. | <input type="checkbox"/> | |
| 166. Let each other know how we really feel. | 166. | <input type="checkbox"/> | |
| 167. Are outspoken and frank in expressing ourselves. | 167. | <input type="checkbox"/> | |
| 168. Go to church as a family. | 168. | <input type="checkbox"/> | |
| 169. Let off steam when frustrated. | 169. | <input type="checkbox"/> | |
| 170. Stress the importance of education. | 170. | <input type="checkbox"/> | |

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| 171. Respect the property of other people. | 171. | <input type="checkbox"/> |
| 172. Ridicule people who are educated. | 172. | <input type="checkbox"/> |
| 173. Have high aspirations for children's attainments. | 173. | <input type="checkbox"/> |
| 174. Follow saying, "Losers weepers, finders keepers." | 174. | <input type="checkbox"/> |
| 175. Make each member not feel shy and self conscious in social situations. | 175. | <input type="checkbox"/> |
| 176. Consider friends before family members. | 176. | <input type="checkbox"/> |
| 177. Help each member to plan ahead. | 177. | <input type="checkbox"/> |
| 178. Consider children a nuisance in the home. | 178. | <input type="checkbox"/> |
| 179. Allow members to give orders to others. | 179. | <input type="checkbox"/> |
| 180. Encourage each member to know himself/herself. | 180. | <input type="checkbox"/> |
| 181. Try to have more children. | 181. | <input type="checkbox"/> |
| 182. Discipline children by isolating them. | 182. | <input type="checkbox"/> |
| 183. Exchange roles playfully when the children give orders to parents and parents obey as children. | 183. | <input type="checkbox"/> |
| 184. Divide duties among members of family. | 184. | <input type="checkbox"/> |
| 185. Spend time doing things separately. | 185. | <input type="checkbox"/> |
| 186. Restrict social activity. | 186. | <input type="checkbox"/> |
| 187. Help each member develop will power. | 187. | <input type="checkbox"/> |
| 188. Read together. | 188. | <input type="checkbox"/> |
| 189. Encourage the children to study physical education. | 189. | <input type="checkbox"/> |
| 190. Sing together. | 190. | <input type="checkbox"/> |
| 191. Go separately to church. | 191. | <input type="checkbox"/> |
| 192. Teach children to respect everyone regardless of color, creed, or nationality. | 192. | <input type="checkbox"/> |
| 193. Give money to the church. | 193. | <input type="checkbox"/> |
| 194. Do unusual things. | 194. | <input type="checkbox"/> |
| 195. Instruct the children in moral values. | 195. | <input type="checkbox"/> |
| 196. Try out new ideas. | 196. | <input type="checkbox"/> |
| 197. Help eliminate feelings of loneliness. | 197. | <input type="checkbox"/> |
| 198. Understand the children. | 198. | <input type="checkbox"/> |
| 199. Encourage members to do favors for others. | 199. | <input type="checkbox"/> |
| 200. Make members feel that nobody cares. | 200. | <input type="checkbox"/> |
| 201. Follow practice that children are to be seen not heard. | 201. | <input type="checkbox"/> |
| 202. Talk to children about sex. | 202. | <input type="checkbox"/> |
| 203. Practice not having children because it is not wise to have them the way things are today. | 203. | <input type="checkbox"/> |
| 204. Discipline children by talking with them. | 204. | <input type="checkbox"/> |
| 205. Attend communion services. | 205. | <input type="checkbox"/> |

FUNCTIONS

- (1) Reproductive
- (2) Economic
- (3) Protective
- (4) Nurturant
- (5) Philosophical
- (6) Socialization
- (7) Education
- (8) Personalization
- (9) Fits no function listed
- (10) Eliminate from list

206. Are consistent in the way the children are reared.	206.	<input type="checkbox"/>	
207. Use permissive discipline.	207.	<input type="checkbox"/>	
208. Urge children to finish high school.	208.	<input type="checkbox"/>	
209. Emphasize each one's own decision-making power.	209.	<input type="checkbox"/>	
210. Go camping together.	210.	<input type="checkbox"/>	
211. Teach the children how to live and work with people outside of the family.	211.	<input type="checkbox"/>	
212. Say grace at mealtime.	212.	<input type="checkbox"/>	
213. Help others in distress or need.	213.	<input type="checkbox"/>	
214. Play games together.	214.	<input type="checkbox"/>	
215. Encourage others to attend religious services.	215.	<input type="checkbox"/>	
216. Encourage each other to attain the highest goals possible.	216.	<input type="checkbox"/>	(1) Reproductive
217. Instill in the children the mores, values, and customs of our society.	217.	<input type="checkbox"/>	(2) Economic
218. Discourage children's dropping out of school.	218.	<input type="checkbox"/>	(3) Protective
219. Push children to do the wrong things.	219.	<input type="checkbox"/>	(4) Nurturant
220. Follow the same routine every day.	220.	<input type="checkbox"/>	(5) Philosophical
221. Encourage at least a vocational education.	221.	<input type="checkbox"/>	(6) Socialization
222. Treat everyone as equal.	222.	<input type="checkbox"/>	(7) Education
223. Can depend upon the children.	223.	<input type="checkbox"/>	(8) Personalization
224. Guide each member in developing self-identity.	224.	<input type="checkbox"/>	(9) Fits no function listed
225. Agree on methods of rearing the children.	225.	<input type="checkbox"/>	(10) Eliminate from list
226. Take care of other relatives as part of the immediate family.	226.	<input type="checkbox"/>	
227. Use authoritarian discipline.	227.	<input type="checkbox"/>	
228. Give emotional support to its members.	228.	<input type="checkbox"/>	
229. Give compensation for family duties.	229.	<input type="checkbox"/>	
230. Learn to be self-critical.	230.	<input type="checkbox"/>	
231. Have many visitors.	231.	<input type="checkbox"/>	
232. Give physical support to its members.	232.	<input type="checkbox"/>	
233. Instill a sense of loyalty to our country.	233.	<input type="checkbox"/>	
234. Go to the park together.	234.	<input type="checkbox"/>	
235. Encourage participation in government and community activities such as voting and charitable drives.	235.	<input type="checkbox"/>	
236. Encourage others to lead religious lives.	236.	<input type="checkbox"/>	
237. Regard the Bible as the Word of God.	237.	<input type="checkbox"/>	
238. Read the Bible because it is our duty.	238.	<input type="checkbox"/>	
239. Make members feel trapped in the home.	239.	<input type="checkbox"/>	

FUNCTIONS

- (1) Reproductive
- (2) Economic
- (3) Protective
- (4) Nurturant
- (5) Philosophical
- (6) Socialization
- (7) Education
- (8) Personalization
- (9) Fits no function listed
- (10) Eliminate from list

- | | | |
|--|------|--------------------------|
| 240. Encourage members to see themselves as they are and what they want to be. | 240. | <input type="checkbox"/> |
| 241. Make children want to leave home. | 241. | <input type="checkbox"/> |
| 242. Expect members to follow orders from others. | 242. | <input type="checkbox"/> |
| 243. Try to do things the same way other people do them. | 243. | <input type="checkbox"/> |
| 244. Push children to do the right things. | 244. | <input type="checkbox"/> |
| 245. Encourage members to think through their problems. | 245. | <input type="checkbox"/> |
| 246. Use democratic methods of discipline. | 246. | <input type="checkbox"/> |
| 247. Accept moral responsibilities. | 247. | <input type="checkbox"/> |
| 248. Do what is expected. | 248. | <input type="checkbox"/> |
| 249. Consider the children's feelings. | 249. | <input type="checkbox"/> |
| 250. Try to be different from other people. | 250. | <input type="checkbox"/> |
| 251. Have to tell children what to do constantly. | 251. | <input type="checkbox"/> |
| 252. Read the Bible for peace of mind. | 252. | <input type="checkbox"/> |
| 253. Teach children to believe in a Being greater than man. | 253. | <input type="checkbox"/> |
| 254. Read the Bible for solutions to daily problems. | 254. | <input type="checkbox"/> |
| 255. Take care of other persons who are not members of the immediate family. | 255. | <input type="checkbox"/> |
| 256. Find time for recreation and relaxation. | 256. | <input type="checkbox"/> |
| 257. Consider family before friends. | 257. | <input type="checkbox"/> |
| 258. Live our lives independent of others. | 258. | <input type="checkbox"/> |
| 259. Encourage children to do things voluntarily. | 259. | <input type="checkbox"/> |
| 260. Allow outsiders to interfere with the running of the family. | 260. | <input type="checkbox"/> |
| 261. Are courteous to each other. | 261. | <input type="checkbox"/> |
| 262. Treat Bible as only a historical or literary book. | 262. | <input type="checkbox"/> |
| 263. Encourage each other to act as we please. | 263. | <input type="checkbox"/> |
| 264. Encourage children to tell secrets to parents. | 264. | <input type="checkbox"/> |
| 265. Have a double standard for rearing children. | 265. | <input type="checkbox"/> |
| 266. Encourage children to use their initiative. | 266. | <input type="checkbox"/> |
| 267. Conceal family secrets from outsiders. | 267. | <input type="checkbox"/> |
| 268. Steal if necessary. | 268. | <input type="checkbox"/> |
| 269. Keep a Bible handy around the house. | 269. | <input type="checkbox"/> |
| 270. Allow early dating. | 270. | <input type="checkbox"/> |
| 271. Use other religious books besides the Bible. | 271. | <input type="checkbox"/> |
| 272. Use other religious books instead of the Bible. | 272. | <input type="checkbox"/> |
| 273. Pay attention to the children. | 273. | <input type="checkbox"/> |

FUNCTIONS

- (1) Reproductive
- (2) Economic
- (3) Protective
- (4) Nurturant
- (5) Philosophical
- (6) Socialization
- (7) Education
- (8) Personalization
- (9) Fits no function listed
- (10) Eliminate from list

- | | | | |
|---|------|--------------------------|--|
| 274. Are cross or disagreeable with each other. | 274. | <input type="checkbox"/> | |
| 275. Encourage working together as a family. | 275. | <input type="checkbox"/> | |
| 276. Are dishonest. | 276. | <input type="checkbox"/> | |
| 277. Drink socially at home. | 277. | <input type="checkbox"/> | |
| 278. Lead children to have a lack of initiative. | 278. | <input type="checkbox"/> | |
| 279. Allow outsiders to bother or molest family members. | 279. | <input type="checkbox"/> | |
| 280. Tell lies if necessary. | 280. | <input type="checkbox"/> | |
| 281. Pay for things we break. | 281. | <input type="checkbox"/> | |
| 282. Have high educational expectations. | 282. | <input type="checkbox"/> | |
| 283. Take things as they come in the family. | 283. | <input type="checkbox"/> | |
| 284. Lead each member to just live from day to day. | 284. | <input type="checkbox"/> | |
| 285. Spend as much time together as possible as a family. | 285. | <input type="checkbox"/> | |
| 286. Encourage warmth and love towards each other. | 286. | <input type="checkbox"/> | |
| 287. Fight for each other. | 287. | <input type="checkbox"/> | |
| 288. Encourage the children to go to college. | 288. | <input type="checkbox"/> | |
| 289. Encourage members to finish work begun. | 289. | <input type="checkbox"/> | |
| 290. Try to make each one feel important. | 290. | <input type="checkbox"/> | |
| 291. Volunteer information concerning wrongdoing, even if friends are involved. | 291. | <input type="checkbox"/> | |
| 292. Visit other churches. | 292. | <input type="checkbox"/> | |
| 293. Make members feel that they have more bad luck than good luck. | 293. | <input type="checkbox"/> | |
| 294. Encourage each member to have strong, healthy bodies. | 294. | <input type="checkbox"/> | |
| 295. Lead members to make up minds immediately on matters. | 295. | <input type="checkbox"/> | |

FUNCTIONS

- (1) Reproductive
- (2) Economic
- (3) Protective
- (4) Nurturant
- (5) Philosophical
- (6) Socialization
- (7) Education
- (8) Personalization
- (9) Fits no function listed
- (10) Eliminate from list

If you think there are other activities or behaviors not listed which should be included, please write them on the lines below.

296. _____
297. _____
298. _____
299. _____
300. _____

APPENDIX C
FAMILY FUNCTIONS SCALE

Interview Form

FAMILY FUNCTIONS SCALE

WRITE THE CORRECT NUMBER IN THE BOX(es)

- ☐ 1. City or town where you live:
- | | | |
|--------------------|---------------|------------------|
| 1. Berrien Springs | 3. Eau Claire | 5. Other _____ |
| 2. Buchanan | 4. Niles | (Indicate which) |
- ☐ 2. School:
- | | |
|--------------------------------|---------------------------|
| 1. Andrews Academy | 4. Eau Claire High School |
| 2. Berrien Springs High School | 5. Niles High School |
| 3. Buchanan High School | 6. Shiloh Academy |
- ☐ 3. Grade:
- | | |
|---------|---------|
| 1. 9th | 3. 11th |
| 2. 10th | 4. 12th |
- ☐ 4. Occupation of head of household: _____
- ☐ 5. Family member completing this Family Functions Scale:
- | |
|-----------------|
| 1. Daughter |
| 2. Son |
| 3. Other: _____ |
| Indicate which |
- ☐ 6. Sex:
- | | |
|---------|-----------|
| 1. Male | 2. Female |
|---------|-----------|
- ☐ 7. Age:
- | | | |
|-------------|-------|----------------|
| 1. Under 16 | 4. 18 | 7. 21 and over |
| 2. 16 | 5. 19 | |
| 3. 17 | 6. 20 | |
- ☐ 8. Total number of children in the family (includes stepchildren, foster, adopted, grown, etc.)
- ☐ 9. Number of children living at home
- ☐ 10. Number of children living away from home

FAMILY FUNCTIONS SCALE

This scale is part of a group study of the family. Your answers will be anonymous and confidential. Do not sign your name. Thank you for your cooperation.

The following Family Functions Scale is to assess some of the activities and services in which families engage. Please indicate the extent to which your family participates in these activities and services according to the scale shown below:

1. Never
2. Sometimes
3. Often
4. Very often
5. All the time

Write the number of your choice in the box after the activity.

Example: Discuss family problems together.

Go hiking together.

Activities and Services

IN OUR FAMILY WE:

- | | | |
|---|--------------------------|-----------------|
| 1. Share in the performance of each other's duties. | 1. <input type="text"/> | |
| 2. Teach language skills to the children. | 2. <input type="text"/> | |
| 3. Recognize that some events do not have scientific explanations for them. | 3. <input type="text"/> | |
| 4. Give financial support to family members. | 4. <input type="text"/> | |
| 5. Feel the importance of having children to maintain the family line. | 5. <input type="text"/> | 1. Never |
| 6. Participate in clubs and community activities. | 6. <input type="text"/> | 2. Sometimes |
| 7. Share economic responsibilities. | 7. <input type="text"/> | 3. Often |
| 8. Believe that parents should have only as many children as they can raise properly. | 8. <input type="text"/> | 4. Very often |
| 9. Recognize the inherited differences in physical skills of individual members. | 9. <input type="text"/> | 5. All the time |
| 10. Consider the home to be the child's first school. | 10. <input type="text"/> | |
| 11. Provide physical protection for family members. | 11. <input type="text"/> | |
| 12. Help members to abide by family rules. | 12. <input type="text"/> | |
| 13. Recognize childbearing to be part of family living. | 13. <input type="text"/> | |
| 14. Accept evidence of emotional expressions that are due to inherited tendencies. | 14. <input type="text"/> | |
| 15. Feel that childbearing should not take place out of wedlock. | 15. <input type="text"/> | |

Activities and Services

IN OUR FAMILY WE:

- | | | | |
|--|-----|--------------------------|-----------------|
| 16. Teach the children how to live and work with people outside of the family. | 16. | <input type="checkbox"/> | |
| 17. Help each other in gaining useful skills. | 17. | <input type="checkbox"/> | |
| 18. Obtain our income through employment. | 18. | <input type="checkbox"/> | |
| 19. Recognize that learning is a lifelong process. | 19. | <input type="checkbox"/> | |
| 20. Read the Bible for solutions to daily problems. | 20. | <input type="checkbox"/> | |
| 21. Comfort members for whom things are going badly. | 21. | <input type="checkbox"/> | |
| 22. Believe that man has a special purpose for being. | 22. | <input type="checkbox"/> | |
| 23. Show disapproval when members break family rules. | 23. | <input type="checkbox"/> | 1. Never |
| 24. Make rules and regulations governing the family. | 24. | <input type="checkbox"/> | 2. Sometimes |
| 25. Demonstrate love to each other. | 25. | <input type="checkbox"/> | 3. Often |
| 26. Help each other to feel that we have accomplished and achieved. | 26. | <input type="checkbox"/> | 4. Very often |
| | | | 5. All the time |
| 27. Use educational books. | 27. | <input type="checkbox"/> | |
| 28. Notice differences in the facial features and body build of family members. | 28. | <input type="checkbox"/> | |
| 29. Make family members aware of their cultural heritage. | 29. | <input type="checkbox"/> | |
| 30. Believe that "blood is thicker than water." (Blood relatives are closer than non-blood relatives). | 30. | <input type="checkbox"/> | |
| 31. Encourage independence. | 31. | <input type="checkbox"/> | |
| 32. Act in a way which meets community approval. | 32. | <input type="checkbox"/> | |
| 33. Care for members when they are sick. | 33. | <input type="checkbox"/> | |
| 34. Get financial assistance from the government. | 34. | <input type="checkbox"/> | |
| 35. Accept inherited differences in family members. | 35. | <input type="checkbox"/> | |
| 36. Make family members feel wanted, secure, worthwhile. | 36. | <input type="checkbox"/> | |
| 37. Notice similarities in the facial features and body build of family members. | 37. | <input type="checkbox"/> | |
| 38. Stress the Golden Rule. | 38. | <input type="checkbox"/> | |
| 39. Defend the family from outside forces. | 39. | <input type="checkbox"/> | |
| 40. Teach children the difference between right and wrong. | 40. | <input type="checkbox"/> | |

APPENDIX D
LETTER OF INTRODUCTION

.

Andrews University Bernien Springs, Michigan 49104 (616) 471-7771

September 12, 1978

TO WHOM IT MAY CONCERN:

This is a letter of introduction regarding Mr. John Rodgers. Mr. Rodgers is one of my doctoral advisees in the area of Educational and Counseling Psychology. He is conducting his dissertation research in the area of family functions, in an attempt to establish a theoretical basis for the development of child and family counseling materials.

As Mr. Rodgers seeks to secure a number of high school seniors to respond to a brief questionnaire, I will appreciate any assistance you are able to give to him. The questionnaire will only take about fifteen minutes to administer, and the questions are not of a controversial nature.

Thank you for your kind assistance.

Sincerely,



Conrad A. Reichert, Coordinator
Graduate Programs in Educational
and Counseling Psychology

be,

APPENDIX E

INSTRUCTIONS FOR ADMINISTRATION OF SCALE

ORAL INSTRUCTIONS FOR TESTER

Tell the students the following:

You have been asked to participate in a study about the things that families do. You are among the many high school seniors who have taken and are taking part in this study.

All that is asked of you is that you read the instructions carefully before you start to respond. Let your answers be honest and to the best of your knowledge. (Teacher or tester will pause here to allow the Family Functions Scale to be passed out).

Continue with the instructions:

The following points are very important:

1. Please answer each statement and put only one number in each box.
2. Do not leave any box blank with the exception of one-- Box #4 on the first page. Write in the occupation.
3. Do not sign your name. Your responses are to be anonymous and confidential.
4. Repeat in your mind before answering the statements on pages 2 and 3 the words: "In our family we. . . ." You are to think of your personal family.
5. No. 1 on the first page means where you live now and not necessarily where your family lives.
6. This test will only take a few minutes. When you finish, hold up your paper and someone will come around to collect it. Thank you for your cooperation.
7. Remember--do not sign your name. Answer all items.

APPENDIX F
INDIVIDUAL SCORES OF RESPONDENTS

Columns 1 through 17 provide the interview information: city or town of the respondents, name of the school, grade, occupation of the head of the household, family relationship of the respondent, sex, age, total number of children in the family, number of children living at home, and number of children living away from the home.

TABLE 19

INDIVIDUAL SCORES OF RESPONDENTS

[illegible]

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73.000	073	51432114541	223-222223371232222222222222222222222222
74.000	074	114 213222	32-5335535554253414445325533544451454245
75.000	075	2143123413	5231513455445413214543211452143433154321
76.000	076	1142123624	22425345243-411333333333333152333-1271433
77.000	077	2347123725	2231214515212122123122421212121425415123
78.000	078	2341123532	2142122545445151254522545422521124222115
79.000	079	23-9213211	314224253322322545512342324211343143225
80.000	080	234 213523	3112133553335445335151223423214454554345
81.000	081	2341213523	2112312531323553255233532223352331533535
82.000	082	2347214413	3242112442223352355345324322122341443525
83.000	083	2343323440	544432443555445544514555555324251 445
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85.000	085	2341123440	4325312255522244235151224545122551453245
86.000	086	2343123110	232221343354423425521134225421454122155
87.000	087	2343214330	4214345245544334525145245423233451454155
88.000	088	2343123514	3115314535522234445145422225515252235355
89.000	089	2343123330	2112122525211252255122212222121221352151
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91.000	091	2343123440	2112121433441124232111212223121341333115
92.000	092	2347123220	21143235324211124433121111223112231222112
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97.000	097	2342213550	221221132333325225512133223112221123225
98.000	098	2343214871	1242212255243443335122445435155441225-34
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100.000	100	2342213541	2213312554455453355153553355415453334555
101.000	101	2341213523	2123132433322144453132322323334441322233
102.000	102	2341123110	41252255555525555551555455522551545525
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104.000	104	2343123331	51454535555554555524555455534551445255
105.000	105	2341122330	432522324455222455145443224412451333145
106.000	106	2343123514	22234435355342132552323433233331233234
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108.000	108	2341213514	213222222222222225523222222222231243223
109.000	109	2343 14550	31323233332323143333214323332122332133353
110.000	110	2341213532	3214343351322453543333433443234132335
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112.000	112	2349123321	2344422454543554354143334445224452545344
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116.000	116	2342213541	2315434555434535355143553332145551532255
117.000	117	2342213220	333422455435435545535544432214451542435
118.000	118	234 114431	1112112531211113123122213311222111122
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123.000	123	2343213550	2211221545545454343335434435512251545345
124.000	124	234 213953	223221222122222213122232223232221222223
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126.000	126	2342124734	222322353553215455155552222215552552255
127.000	127	2342215633	1123313523234352553122222242222541242135
128.000	128	2341213550	4525555545533532344142223433233353455254
129.000	129	2241213211	5322334343433222455141422324212332334233
130.000	130	2341214615	21 2122325531352344131212211212241331115
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136.000	136	2343124919	3114344231333553415155423532315551544325
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138.000	138	2347123211	211442222444435445422344234334445133245
139.000	139	4343123431	1122213113351531551212521171252512221125
140.000	140	4348123110	3125123555351555555141455533325351553335
141.000	141	2347214523	2235432455544353442543223344515551344255
142.000	142	4347213330	2122112444222552541224322212224222234
143.000	143	2343213924	215242255423254525523355553315451555544
144.000	144	234 123611	213211342333213222312354222213234 222223

TABLE 19--Continued

145.000	145	2343213993	2435133335241222345142221234223421215135
146.000	146	2341124725	321434455545445555234525434215551554255
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148.000	148	2347123514	423334242252325445523432222534324322435
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153.000	153	234 314853	212222222222222222122222222222222222222
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161.000	161	2341122211	213222555453232125512342222213441322221
162.000	162	2347213312	212222323322222243122122111213221322112
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171.000	171	2347123330	4225415555534455424555555434222455155555
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173.000	173	2341213220	522552554555545555515544555555551555355
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176.000	176	2342213220	22555255534555455555243553332553551453555
177.000	177	4340213523	325513335533315553525211553432535255335
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181.000	181	2341214431	4123222545352214555244335543233451454445
182.000	182	2342123220	211222253454322325513251222122251442345
183.000	183	2341123330	3134122535543355455255324342214451443434
184.000	184	2347213555	2115452353212344355132322245113421222212
185.000	185	2342123422	212222223422222255143212223222231323223
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187.000	187	4341123431	4122223322443334455234413334343451545445
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215.000	215	3449123532	2213132333333224435143113433212251554425
216.000	216	3449123431	2111333534435323455335224244244251344444

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TABLE 19--Continued

361.000	361	1241124321	3133224452422523455142324222414351542244
362.000	362	4542213321	3132111435324321345134223411214141244343
363.000	363	4543122413	3424253524542244555253322442224451354325
364.000	364	4541123550	2352122353541414445122222255525232535234
365.000	365	4542123413	3244322544255453454155544334233441555445
366.000	366	4541123321	2223244532233255554122223525221551224425
367.000	367	4543124431	2342522535125455555224423352332551234435
368.000	368	4542223220	2322432332323223354234422333743241233235
369.000	369	4541123211	212423233322221153134215322124431453223
370.000	370	4542123734	2314222422345354455245344345214551345355
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375.000	375	4547124321	2342412554435455354345553455443551325125
376.000	376	4541123211	223543455554455545514433455215541355555
377.000	377	4543123330	3323122343312124343122312223211242333434
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399.000	399	4540213550	353454353555444554454545554445555545555
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412.000	412	4542324000	2154222443334323454243324225213351434344
413.000	413	4543123440	2214113242421322133122212214221235224233
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415.000	415	4542214532	3323443233333224555355332232313351253335
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429.000	429	454 214440	211321245552521523512253222221251255555
430.000	430	4543123422	2122212451541455255145555323135541433445
431.000	431	4541213523	222332255354341235512522 372313231352253
432.000	432	4541123440	2224433455423455355434453354224451554245

TABLE 19--Continued

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434.000	434	4542313413	3143152352324225455124332332345431534325
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436.000	436	4549124514	2135522505215314454135115534245551354355
437.000	437	4542123321	312333343524231435422342222222234132225
438.000	438	4542122321	32253135223223532332235532222325222255
439.000	439	4541214330	1332224545433213554144323223313431344345
440.000	440	454 123935	2252414152254214214523232232222335145225
441.000	441	454 124633	4313412345535552235255553755345451555355
442.000	442	4543123660	2234322433323423344123323224312232243235
443.000	443	4541214431	2212124555452212455123512355522521545355
444.000	444	4543212514	3215325554555444555433545453453554554455
445.000	445	4547123440	4123152555551355355335453532225351354535
446.000	446	4543123312	32355425554455254552452444332122551345555
447.000	447	4542123321	3212242522332324353122221222225441321334
448.000	448	4542121321	2223123542333252354143222323212241323344
449.000	449	4547123523	3242122552235231543125212222114231554222
450.000	450	4542122330	242435253515414555455224432122551342525
451.000	451	4548214734	222222255555553355235434323325551554525
452.000	452	4542213321	2221231112342352355321313321412551141415
453.000	453	4543213321	2133122432222332354152332222123331222333
454.000	454	4543123321	41445343454443554553535334533451544555
455.000	455	4541123642	3214523545535324355124323345325451435455
456.000	456	4542214220	3122222524513511355145112323145321553133
457.000	457	4547114440	5134124555554214445244244454352441455555
458.000	458	4542213330	321225212334235445535553342242351342445
459.000	459	4541213326	3222312155213322255123222325244451554545
460.000	460	4547214743	22334334222333253355235532344455541555355
461.000	461	4542213321	213423213432242335215411132434235354445
462.000	462	4543123330	5345434555445257445125552425455551545345
463.000	463	4541213541	2132322454322422255123222345245532332343
464.000	464	4542213642	2322234343343214354232443233233441343444
465.000	465	4542213330	213231242421134224413221231212123251341323
466.000	466	4542213330	212212212155231235515523352223251232423
467.000	467	4543213853	544434423455443445424434344444444444444
468.000	468	4543213312	2124222334323225355232335345453441243445
469.000	469	4541123211	3155544435545455555555245543435551555545
470.000	470	4543123743	2324213521453415443244135454543544355553
471.000	471	454 123927	32322 152522 14555225
472.000	472	4542123720	2124321231351153255221422212111444424123
473.000	473	4542123422	2224212233133413345244524435313352445234
474.000	474	4542213330	3323125545552254555233222554515551555555
475.000	475	4542213430	3213253525523343455145153455334451255355
476.000	476	4543124430	22132424145232355541222222222214531552355
477.000	477	4543213422	2112113334215155255125222222215125312223
478.000	478	5541213633	232431244553345445512442545525451545455
479.000	479	4543213642	3122444214434252255124531153323331213242
480.000	480	4542123510	413453334443433435513222343344443233243
481.000	481	4549322420	5424414535443455534522353342114145444454
482.000	482	4547123550	422312255245435445422254223543231223355
483.000	483	5642124110	2312535155435115555125225525212555531155
484.000	484	5647123725	211532353442234335524311433524414135 345
485.000	485	5648217110	315352315555555553555555555355551535555
486.000	486	5642214835	43232232554242554352222233224321222245
487.000	487	5647124312	21325235554555545454243354232324122235
488.000	488	5641123931	2123112444335552245223441222213233322225
489.000	489	5642124871	2112342125554325435425345553445231244355
490.000	490	5642123232	52121112125553552555525522522251252225
491.000	491	5643223560	223322431453233534552344423245352255555
492.000	492	5642122220	5211123555552552455354525554245551153555
493.000	493	5643213741	3112112111232434254233431133122121312134
494.000	494	5641212220	5225522535553555545555554555551555455
495.000	495	5642213660	2134412545554144554344545344324354323534
496.000	496	5641123422	4224225555225355245254314545125551344135
497.000	497	5647123431	24154135555352555424542525555431355545
498.000	498	5641123642	232533455555355553553553552533545155555
499.000	499	5641313110	3152522244223453453225213443554451433455
500.000	500	5641213440	2232112552453153325134512232212431527425
501.000	501	5643121541	2515324525 35355455225342242345151233355
502.000	502	5647123110	241223324555232545555455444522341234255
503.000	503	5642123541	3451511555555355355235554443315551353555

APPENDIX G
RAW STATISTICAL DATA

TABLE 20
A 40 X 4 CORRELATION MATRIX BETWEEN
ITEMS AND FACTORS

Rotation of
4 Factors

VARIABLE	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
1	.60529	-.07921	-.02423	.00595
2	.41282	-.03638	.24120	-.10392
3	.30397	-.10669	.15630	-.00540
4	.49410	-.15950	-.01039	-.05897
5	.40585	-.27877	.14660	-.24186
6	.45997	-.05822	.09609	.07358
7	.56905	-.06604	.08130	.02546
8	.16420	-.24888	.18722	.30758
9	.23849	-.43751	.04894	.17851
10	.41113	-.39887	.15792	.21173
11	.31528	-.35640	.11260	-.06406
12	.34682	-.25831	.49125	-.04687
13	.28492	-.43667	.23545	-.12840
14	.22589	-.47814	.09876	.07625
15	.08806	-.07414	.51618	.31991
16	.49305	-.41126	.13781	.09468
17	.61199	-.37531	.07508	.06503
18	-.03471	-.27130	.13957	.54240
19	.23524	-.47438	.10687	.35091
20	.44796	-.03306	.45248	-.20602
21	.53919	-.42512	.11329	.06194
22	.41084	-.38553	.30643	.02396
23	.02801	-.18975	.74709	.09437
24	.12435	-.16621	.75944	-.03732
25	.54805	-.40567	.23077	-.07935
26	.58993	-.48048	.11034	.00144
27	.31817	-.38693	.26646	.07971
28	.04143	-.60640	.17203	-.06862
29	.21562	-.42223	.29011	-.36226
30	.02478	-.45248	.13878	-.41471
31	.14699	-.60345	.02267	.22974
32	.12867	-.43006	.29399	.12494
33	.27052	-.54710	.26298	.01045
34	.07988	-.05619	.01397	-.59636
35	.10146	-.55999	.02866	.12488
36	.41468	-.59553	.00395	-.06973
37	.10479	-.66584	.14561	-.14383
38	.22223	-.46175	.46093	-.07430
39	.19859	-.65567	.14274	-.07668
40	.20232	-.52342	.35802	.15040

TABLE 21
A 40 X 6 CORRELATION MATRIX BETWEEN
ITEMS AND FACTORS

Rotation of
6 Factors

VARIABLE	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
1	.32375	.03364	-.05146	-.08416	.07154	-.07907
2	.03389	-.13267	.22626	-.18861	-.15177	-.18420
3	.11580	.09019	.06082	-.01214	.09331	.08452
4	.22709	.00479	.05381	.03929	.03063	-.09485
5	.13414	.11371	.00243	-.12299	.35411	-.26526
6	.19570	-.09033	.03006	.11341	.03601	.11123
7	.15993	-.04339	.12421	-.05445	.19528	-.06661
8	.00988	-.13922	.18027	.07410	.61178	-.14319
9	.15414	-.32570	.02243	-.00253	.21826	-.24123
10	.28558	-.07689	.10535	.09400	.31727	-.46876
11	.24150	.06114	.10908	.04192	.04916	-.69787
12	.36415	.00095	.53077	-.06401	-.04398	-.34881
13	.19436	-.10828	.13917	-.22127	.36582	-.43759
14	.28141	-.12971	.05410	-.01331	.52948	-.16625
15	.10344	.08046	.43030	.19703	.45961	.10418
16	.53671	.24748	.15165	-.06356	.03478	-.27843
17	.54910	-.13922	.05930	.04941	-.02524	-.25980
18	.11363	-.24812	.11288	.67734	.00924	-.09496
19	.32641	-.22269	.06640	.23055	.20688	-.43903
20	.35100	.44753	.27335	-.09908	.09246	-.15964
21	.65437	.03364	.07871	.09565	.17298	-.15178
22	.39858	.07192	.17645	.09584	.23330	-.27873
23	.06355	-.15529	.78939	.03264	.12114	-.02938
24	.14933	.04868	.76292	.01256	.11947	-.09435
25	.69433	.05928	.19611	-.01651	.11018	-.05652
26	.76872	-.07619	.11083	.01486	.09545	-.01404
27	.33874	-.09930	.18144	.19957	.00759	-.19100
28	.08966	-.38189	.11500	.13818	-.01012	-.24028
29	.23217	-.05871	.21494	-.08452	-.09100	-.14582
30	.17312	.02029	.06739	-.05870	.15243	.06541
31	.36492	-.42470	.03610	.16799	.31597	-.00428
32	.18195	-.41769	.29289	.09003	.13251	-.00203
33	.57878	-.23687	.30834	.03160	.03139	-.17891
34	.07116	-.09896	.03108	-.77315	-.05332	-.00865
35	.33451	-.49836	.03905	-.09998	.38287	.01272
36	.74814	-.17848	.02466	-.09169	.13448	-.13329
37	.25930	-.40037	.12123	-.03409	-.00663	-.21750
38	.37545	-.11700	.41140	-.04680	.16651	-.04817
39	.41867	-.23262	.12626	.03273	.16766	-.34573
40	.47245	-.38720	.41747	.05843	.02931	-.18849

TABLE 22

A 40 X 7 CORRELATION MATRIX BETWEEN
ITEMS AND FACTORS

Rotation of
7 Factors

VARIABLE	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7
1	.47672	.00571	-.07077	-.03344	.25085	-.09101	-.29326
2	.42708	-.12420	.17879	-.10696	.32652	.11063	-.08174
3	.17293	-.14979	.01991	-.06890	.62011	-.14472	.01857
4	.55041	-.06796	.04006	-.16019	-.11620	-.30017	-.19908
5	.21895	-.11333	.09634	-.33734	.20922	-.27053	-.28707
6	.53851	-.14918	.08013	.09793	.14236	.17061	-.16297
7	.65428	-.01333	.12610	-.08552	-.03443	-.31536	-.14367
8	.12387	-.12364	.19912	.12718	.08498	-.64963	-.02464
9	.10486	-.39251	-.04439	.08230	.41118	-.32813	-.13522
10	.09674	-.15086	.09265	.09464	.30112	-.43024	-.41740
11	-.00683	-.01151	.11304	-.15221	-.04810	-.32890	-.53150
12	.13262	-.05836	.48177	-.08728	.05431	-.08063	-.46464
13	.00310	-.21930	.16646	-.22295	.24978	-.29927	-.37516
14	.04377	-.25874	.08249	-.06330	.07717	-.50504	-.29580
15	-.02342	-.02476	.47935	.24804	.26523	-.22981	-.06323
16	.26111	-.23785	.09594	.08545	.15052	-.01149	-.56624
17	.39160	-.21295	.02962	.05814	.17762	.00958	-.58189
18	-.00915	-.30331	.15414	.57333	-.02944	.06000	-.16574
19	-.07743	-.26619	.03631	.29334	.27127	-.26042	-.43796
20	.01644	.16416	.32094	-.20239	.51742	.08871	-.44524
21	.21887	-.15064	.07356	.01264	.13862	.17214	-.63182
22	.06554	-.17392	.21443	-.02426	.35833	-.13882	-.49685
23	.09513	-.21357	.76647	.03798	.02754	-.10078	-.05572
24	.08145	-.09191	.77648	-.09344	.00666	-.09127	-.20119
25	.25384	-.16387	.18886	-.10665	.13751	-.05091	-.63605
26	.34119	-.25805	.07932	-.02552	.09543	-.06335	-.65412
27	.12935	-.31612	.18798	.07915	.30491	.04393	-.38292
28	.04099	-.64397	.11207	-.10420	.19357	-.06202	-.14674
29	.12060	-.38710	.22680	-.37353	.19090	.07314	-.27446
30	.00470	-.36358	.12555	-.48402	-.02214	-.16833	-.13234
31	.12652	-.52767	.02344	.15386	-.00628	-.28014	-.26523
32	.21897	-.49696	.28612	.09865	.06648	-.02346	-.13765
33	.09430	-.34594	.27231	-.00561	-.09905	-.03632	-.57433
34	.04548	-.04594	-.01820	-.57707	.03576	.15916	-.06144
35	.07707	-.49481	.02523	.07102	-.01507	-.19255	-.25101
36	.12847	-.30609	-.00820	-.09570	-.05529	-.10163	-.69579
37	.02821	-.63788	.07795	-.18134	.19393	.07247	-.26072
38	.05262	-.36941	.39266	-.12522	.26806	-.09775	-.32347
39	-.01057	-.42030	.13384	-.13894	-.05335	-.21576	-.51652
40	.09818	-.40733	.36363	.14423	-.04650	.00668	-.47308

TABLE 23
A 40 X 8 CORRELATION MATRIX BETWEEN
ITEMS AND FACTORS

Rotation of
8 Factors

VARIABLE	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7	FACTOR 8
1	.3391	.01321	-.05671	-.06769	.08444	.31610	.40692	-.03994
2	.14717	.11209	.19109	-.12163	-.10523	.43158	.29868	.05799
3	.01108	.01692	.02420	-.02654	.22055	.62255	.07733	.13829
4	.18088	-.01793	.01642	.02875	.15288	-.04889	.64643	.21738
5	.25087	-.14139	.06774	-.09729	.23231	.17735	.28143	.39718
6	.22691	.14754	.07595	.14940	-.21305	.28707	.42875	.02401
7	.15729	.05221	.12984	-.04871	.18866	.06073	.69730	.03274
8	.00127	.14455	.22416	.05923	.64131	.03163	.20561	-.01386
9	.17052	.32186	-.01552	.02809	.42199	.40451	.02581	.12519
10	.40095	.02617	.10073	.12411	.48898	.22746	.10539	.10408
11	.45360	-.23051	.07869	.03148	.29745	-.15651	.12669	.30467
12	.45902	-.03550	.48319	-.04683	.08790	.03115	.12476	.12775
13	.36173	.05206	.17579	-.17592	.35795	.17967	.00553	.27223
14	.26852	.14821	.09391	-.02901	.52135	.01011	.10903	.21209
15	.06506	.02395	.49743	.16799	.29355	.21526	-.05479	-.10411
16	.62179	.25099	.12772	-.02106	.07845	.19077	.14199	-.00403
17	.62506	.14205	.03538	.09007	.01340	.23692	.29619	.03479
18	.17221	.20943	.12849	.70523	-.004324	-.00463	-.04429	.03363
19	.44168	.17016	.05128	.26821	.37585	.20069	-.12721	.03917
20	.43446	-.37777	.30487	-.09352	-.00124	.44120	-.05414	.13914
21	.63170	.02472	.07285	.08116	.19952	.11830	.19928	.14509
22	.48681	-.05703	.20134	.11485	.20575	.30212	.02932	.24805
23	.68878	.17935	.77724	.03321	.09369	.04573	.07372	.10635
24	.18216	-.03307	.76551	.01151	.06085	-.01052	.10802	.20113
25	.64846	.03124	.18890	-.03539	.07314	.14109	.20816	.19355
26	.68715	.17758	.08997	-.00164	.08416	.13419	.27259	.15208
27	.40314	.10622	.17141	.23267	.01072	.31815	.04381	.25819
28	.15193	.31696	.08048	.18737	.07761	.21859	.01308	.58487
29	.26920	.04844	.18769	-.05995	-.08525	.20997	.10233	.58774
30	.07689	.00927	.07362	-.09342	.09818	-.04987	.11484	.69914
31	.28922	.46580	.04054	.16230	.30395	.01992	.10406	.19891
32	.18918	.43970	.29822	.12063	.03526	.15075	.13337	.20074
33	.58717	.24640	.27865	.03634	.05676	-.09199	.06471	.21827
34	.10879	.11924	.02397	-.74800	-.12491	.07156	-.03327	.09131
35	.30397	.54940	.07321	-.08893	.25559	.02091	.00164	.07607
36	.71176	.22887	.00911	-.10251	.14103	-.06099	.05546	.19166
37	.28015	.37042	.06868	.00197	.11926	.21142	-.02577	.52845
38	.34009	.18686	.39773	-.05205	.15910	.25560	-.01041	.31362
39	.48876	.17634	.11775	.05152	.22308	-.09785	.03502	.43928
40	.51572	.38720	.38791	.08533	.04322	-.01173	.01184	.10222

TABLE 24

A 40 X 9 CORRELATION MATRIX BETWEEN
ITEMS AND FACTORSRotation of
9 Factors

VARIABLE	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7	FACTOR 8	FACTOR 9
1	.47765	-.25714	-.07041	-.07495	.10694	.25551	-.05035	.09137	.03568
2	.42323	-.01219	.18799	-.18925	-.05365	.20683	-.08301	.25759	.33647
3	.16636	.02642	-.02753	-.04189	.28459	.55431	.15370	-.04041	.23144
4	.61329	-.14798	.03698	.03642	.12914	-.06704	-.18899	-.25898	.02335
5	.29938	-.13939	.05629	-.10764	.14682	.26294	-.29475	-.30194	.16794
6	.49547	-.22598	.07777	.13758	-.11800	.15692	.15808	.05743	.17281
7	.68729	-.12574	.14406	-.04434	.21706	-.03261	-.10413	-.07492	-.01773
8	.15726	-.02933	.21136	.07258	.66414	.00215	-.10610	-.04809	-.01912
9	.10426	-.14267	-.03649	-.02415	.48549	.20638	-.08070	.15551	.41282
10	.16082	-.25536	.07789	.09364	.41946	.24110	-.39369	.09573	.17021
11	.13594	-.21372	.02895	.04640	.07832	.00016	-.74747	-.09005	.09435
12	.16226	-.31899	.48553	-.06702	.01147	.12551	-.36767	.05202	.09778
13	.05230	-.24501	.16447	-.21248	.28923	.20333	.37144	-.02738	.26281
14	.06931	-.30855	.08540	-.01215	.50770	.07729	-.15633	-.22204	.08783
15	-.05662	-.09487	.45731	.20111	.34198	.31690	.13568	.00871	-.08342
16	.22718	.55753	.13006	-.05236	.09879	.12689	.18300	.24548	.22246
17	.38553	.533020	.03567	.06157	.01085	.19678	-.20280	.12620	.22338
18	-.02297	-.18337	.13330	.68444	-.01265	-.05344	-.01611	.11922	.23377
19	-.05540	-.34002	.03190	.22782	.33920	.17939	-.30796	.23076	.25720
20	.04504	-.23685	.24969	-.08977	-.10787	.70028	.18717	-.06366	-.02250
21	.22289	.59541	.05914	.10219	.15933	.26946	-.17472	-.12579	.03475
22	.09701	-.36644	.17080	.10208	.14056	.42802	-.24782	-.07693	.19652
23	.06764	-.08011	.78045	.02364	.14691	.03090	-.01648	.00197	.16974
24	.09171	.13494	.76492	.01717	.03360	.11849	-.15259	.114632	.06679
25	.23468	.63230	.17752	-.00971	.05212	.30776	-.09935	-.17867	.05253
26	.29900	-.71956	.08652	.02222	.10803	.22620	-.02991	-.13001	.09227
27	.12924	-.32463	.15571	.19814	.00891	.31209	.12318	.00324	.35972
28	.06409	-.14029	.09066	.11784	.10154	.06536	-.14836	-.18194	.68760
29	.14805	-.21354	.19041	-.09626	-.11585	.23119	-.16073	-.32228	.45002
30	.04671	-.15769	.08152	-.07478	.06040	.09181	-.04964	-.70228	.27627
31	.08199	-.43514	.05090	.16293	.39982	-.07059	.06870	-.11597	.30379
32	.16194	-.27096	.31205	.08943	.15437	-.02258	.09692	.01663	.41947
33	.06648	-.60977	.29723	.03459	.04980	-.02019	-.17914	-.07675	.20446
34	.00014	-.12170	.03868	-.76863	-.09460	-.00087	.01291	.02229	.11659
35	-.00696	.47185	.08736	-.09260	.38310	.11154	.12828	.02598	.27577
36	.09419	-.76219	.02008	-.08350	.12952	.05356	-.14389	-.13931	.11023
37	.02516	-.29568	.07809	-.05687	.15428	.08159	.12614	-.15359	.63548
38	.02384	-.35588	.38132	-.05980	.15236	.29924	-.01618	-.15491	.30215
39	.02506	-.47055	.13471	.03307	.15675	-.02140	-.34549	-.23525	.32077
40	.04198	-.54345	.40699	.06137	.09135	-.05805	-.11351	.13074	.29621

TABLE 25

A 40 X 10 CORRELATION MATRIX BETWEEN
ITEMS AND FACTORSRotation of
10 Factors

VARIABLE	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7	FACTOR 8	FACTOR 9	FACTOR 10
1	.31602	.02600	-.07248	-.10544	-.02671	.06028	.45385	.25058	.12794	.25138
2	.09838	.06598	.22738	-.16513	.12804	.19489	.09659	.16480	.62610	-.02140
3	.09873	.00776	.05069	.00047	-.08176	.80738	.10438	-.13971	.06410	.14254
4	.18783	-.04344	.07756	.03644	.13998	.11058	.72869	-.19078	-.03492	-.06474
5	.06026	-.16625	-.03770	-.12704	.26625	-.01561	.28553	-.38066	.18526	.47117
6	.20534	-.18551	-.00362	.13996	-.08992	-.03281	.14737	-.10276	.71241	.14398
7	.12371	-.10353	.12439	-.04904	.06993	.03090	.68782	-.03238	.19279	.04919
8	.03500	.05502	.19480	.10443	.12297	.16838	.12572	-.01041	.06388	-.01334
9	.11276	-.26455	.00853	-.02236	.18044	.56167	.07113	.06107	.04266	-.02370
10	.25867	-.17310	.09892	.10110	.44118	.30930	.09790	.04561	.10843	.13730
11	.22095	.01988	.13291	.04444	.71944	-.05930	.18161	-.09140	-.02538	.05456
12	.34340	-.04280	.53427	-.07650	.31599	.02717	.16875	.09952	.00212	.10098
13	.13195	-.24409	.10257	-.23863	.38007	.03483	.01922	-.01397	.11988	.34176
14	.31120	-.04381	.06153	-.01443	.10584	-.00780	.08285	-.04599	-.04032	.12404
15	.04218	-.14361	.36893	.16354	-.24248	.03222	.07188	.17581	.121743	.51965
16	.40561	-.48426	.09880	-.11629	.22448	.10870	.24354	.17398	.03455	.20595
17	.48255	-.29323	.02763	.02407	.23226	.10962	.28952	.07224	.23397	.17255
18	.03568	-.41361	.06378	.63834	.05934	-.09385	-.03122	.04058	.05177	.09681
19	.21543	-.40766	.02356	.18836	.37924	.28327	.00228	.14605	-.11460	.18188
20	.30484	.06715	.22301	-.09480	.13254	.19245	-.03098	-.08936	.11802	.66901
21	.64508	-.08446	.07572	.09133	.14751	.11031	.18576	-.05089	.03224	.18768
22	.35019	-.16783	.13800	.08243	.25327	.17578	.01132	-.14078	.15425	.41517
23	.04462	-.17368	.78076	.02956	-.00318	.06526	.04651	-.01784	.05848	.04089
24	.14330	-.05149	.74119	.03142	.03982	-.02744	.05485	.15433	.08935	.15678
25	.70931	-.02354	.19533	-.01841	.04374	.04650	.15496	-.07809	.08805	.21279
26	.76366	.15100	.10991	.00726	.01461	.11808	.22536	-.06106	.03344	.09496
27	.34576	-.10328	.15505	.17895	.10836	.09436	-.00682	.01238	.23081	.23136
28	.10576	-.15741	.10415	.08643	.11407	.04803	.04117	-.14174	.08595	.03364
29	.22013	-.08923	.20600	-.10447	.13560	.11035	.09596	-.38147	.14556	.17037
30	.18366	-.02408	.08934	-.05346	.01941	.09516	.09540	-.73876	-.05489	.05350
31	.30082	-.44338	.01329	.12117	-.04578	.08680	.16453	-.09174	-.12491	-.00392
32	.75759	.56023	.24109	.04548	-.03335	.08985	.14371	-.12852	.12983	.06930
33	.52583	-.35773	.30606	.01750	.23017	.03561	.02593	-.17235	.04654	-.04720
34	.61784	-.14035	.01107	-.79949	-.01291	-.05423	.02405	-.04224	.01059	.09724
35	.28765	-.50262	.01062	-.12376	-.03787	.00843	-.08726	-.07109	.12863	-.03540
36	.75063	-.20778	.03850	-.09191	.17982	.02218	-.00180	.15120	.02889	-.04660
37	.26053	-.19436	.11523	-.09114	.10130	.13356	.04334	-.10098	-.02737	.00128
38	.33606	-.23145	.39135	-.06203	.03195	.29911	-.00704	-.21481	.02226	.18386
39	.38197	-.27752	.12628	.01103	.35774	-.03953	.03313	-.28286	-.00054	.03730
40	.37471	-.54150	.38845	.02528	.19845	.07007	.00498	-.02253	.06832	-.02928

TABLE 26
A 40 X 12 CORRELATION MATRIX BETWEEN
ITEMS AND FACTORS

Rotation of
12 Factors

VARIABLE	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6
1	.53361	-.01543	-.04965	-.04431	.23680	-.20238
2	.37131	-.04804	.18135	-.12738	.38101	.03707
3	.13443	-.13549	.05821	-.07925	.61751	-.15714
4	.39775	-.01962	.00623	-.14077	-.01266	-.40349
5	.28710	-.16374	.12432	-.34078	.14956	-.34632
6	.49746	-.07542	.06727	.07303	.22571	.08517
7	.43796	.06268	.08707	-.06013	.09931	-.42680
8	-.04258	-.15413	.19192	.16491	.12834	-.63287
9	.11593	-.43694	-.01117	.06442	.40071	.31115
10	.29878	-.31344	.15143	.08598	.15806	-.46841
11	.28978	-.20304	.16249	-.15666	-.24255	-.39797
12	.37483	-.17232	.51839	-.10667	-.09370	-.15888
13	.20250	-.34520	.21944	-.23918	.10816	-.33591
14	.11130	-.36503	.10716	-.05814	.01285	-.51625
15	.06066	-.08391	.50527	.25247	.20224	.20941
16	.56332	-.36519	.14366	.04208	.01862	-.09646
17	.67062	-.32047	.07375	.61444	.06839	.10198
18	.10395	-.35896	.16025	.54340	-.04614	.10671
19	.23153	-.46078	.10564	.26281	.09267	.25541
20	.41673	.00185	.41686	-.23812	.24897	-.00670
21	.55713	-.32548	.13235	-.01891	-.03826	-.26859
22	.38967	-.33640	.28805	-.05963	.16293	-.19660
23	.02267	-.18209	.75109	.03683	.05041	-.09429
24	.12524	-.11316	.77901	-.09619	.04705	-.12289
25	.59438	-.31067	.24375	-.14555	-.03469	-.16288
26	.65238	-.39101	.12461	-.06776	-.03763	-.17573
27	.36738	-.40334	.23677	.03228	.19637	.00788
28	.06141	-.63240	.12170	-.14371	.21795	-.03091
29	.24313	-.39390	.25024	-.41349	.14290	.02892
30	-.01192	-.37041	.12226	-.49406	-.01335	-.17695
31	.15718	-.57419	.02511	.13400	.01267	-.26450
32	.17513	-.45550	.27259	.07070	.13542	-.01804
33	.39695	-.47809	.30359	-.04601	.23347	-.09082
34	.08044	-.00612	-.01336	-.59108	.01934	.10511
35	.13220	-.53703	.02929	.04749	-.01040	-.17883
36	.51340	-.48635	.04223	-.13861	-.23363	-.18645
37	.13206	-.66522	.10120	-.22620	.17016	-.06018
38	.21625	-.43777	.43175	-.15889	.17262	-.11862
39	.25098	-.56099	.16938	-.17030	-.18379	-.24456
40	.33798	-.50499	.28617	-.10126	-.13989	-.02002

TABLE 26--(Continued)

Rotation of
12 Factors (continued)

VARIABLE	FACTOR 7	FACTOR 8	FACTOR 9	FACTOR 10	FACTOR 11	FACTOR 12
1	.30375	.05152	.23758	.33983	.23392	-.07543
2	.19069	.00398	.28231	.45168	.24155	-.03644
3	.08104	-.14872	.74401	.05670	.03794	-.01790
4	.68977	-.17713	.07757	.04720	.04437	.00298
5	.13646	-.39722	-.05445	.41661	.07589	-.17586
6	.16055	-.06111	-.05170	.67269	-.03137	-.04248
7	.63559	-.00575	.03373	.28719	-.02304	-.17772
8	.23883	.03892	.14826	-.04277	-.04000	-.69091
9	.06796	-.05294	.55531	.02535	.24016	-.26625
10	.12004	-.02474	.28686	.09402	.09133	-.34142
11	.22199	-.18328	-.09030	-.04239	.13253	-.08392
12	.15418	-.04873	.07516	.03047	.16927	.01280
13	-.07030	-.21733	.04515	.25607	.18392	-.30835
14	.10840	-.20179	.07443	-.01694	.23256	-.59053
15	-.15309	.05249	.14223	.13101	.10408	-.29539
16	.05548	.06486	.12129	.27245	.12462	.06140
17	.18382	-.04634	.13502	.36635	.16209	.05823
18	-.12567	.02031	-.09309	.19440	.13930	.06044
19	-.11283	.04074	.26276	.04386	.14151	-.13272
20	-.21022	.17196	.20994	.35525	-.00997	.12238
21	.15007	-.13906	.13910	.10684	.11192	-.14645
22	-.08245	-.23623	.17074	.29253	.12997	-.12368
23	.07050	-.07494	.07237	.03125	.11074	-.14103
24	.08351	-.18338	-.04408	.07003	.04540	-.09753
25	.12571	-.20522	.11352	.15827	.17233	-.10372
26	.19943	.15719	.15586	.14091	.15252	-.09747
27	-.05942	-.23389	.21199	.30275	.39914	-.04019
28	.00154	-.52152	.22373	.14984	.76254	-.10655
29	.04768	-.56463	.13522	.20501	.40411	.11934
30	.13063	-.73150	.00211	-.07466	.19856	-.07608
31	.08867	.18686	.11388	.00436	.27072	-.29797
32	.02736	-.18159	.06163	.27517	.19640	-.05356
33	.05481	-.17652	-.05180	.00945	.06110	-.02206
34	-.08455	-.08032	-.04436	.11801	.05624	.10286
35	-.08450	-.07351	-.01748	.12702	.10912	-.40923
36	.06765	-.17591	-.01666	.00655	.07694	-.18282
37	-.00393	-.46245	.29124	.03827	.71006	-.10020
38	-.04674	-.30624	.27947	.07129	.20006	-.10701
39	.04365	-.38217	.07132	.01313	.26299	-.17375
40	-.02303	-.04360	-.00231	.09121	.07600	-.00232

TABLE 27

A 40 X 22 CORRELATION MATRIX BETWEEN
ITEMS AND FACTORS

Rotation of
22 Factors

VARIABLE	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7	FACTOR 8	FACTOR 9	FACTOR 10
1	.19223	.03006	.01389	-.01208	.05369	.06918	.09155	.00159	.10347	.08042
2	.08386	.06388	.11358	.03273	-.01001	.08324	.09975	.02508	.08771	.06671
3	.08425	-.04547	.01378	-.06753	.07426	.08726	.09306	.01460	.08659	.06813
4	.20446	-.00038	.01158	-.12797	.06509	.06441	.86286	.00681	.14941	.06590
5	.14869	.09737	.07760	-.19359	.08263	.03467	.21030	-.00980	-.00798	.78839
6	.15588	-.03031	.04122	-.03032	.03393	.02878	.02665	.08093	.10665	.06401
7	.07617	.10325	.17190	.12030	.14923	.09641	.53690	-.01887	-.13685	.12448
8	.09785	-.07418	.08303	-.05235	.04766	.02789	.03565	.01813	.06267	.07732
9	.13080	-.00269	.04291	-.03374	.14806	.02739	.03237	.10907	.03539	.07311
10	.23167	-.01619	.13158	-.02402	.26354	.07407	.14988	.20630	.03896	.13482
11	.15694	-.03639	.03436	-.12489	.20675	-.09576	.14797	.04202	.01145	.11259
12	.28101	-.02135	.36879	.03595	-.13495	.08516	.01164	-.05768	.09662	.01797
13	.21656	.04929	.07520	.01968	.03575	.08007	.11626	.09760	.15281	.67572
14	.23871	-.01649	.09963	-.09525	.12954	-.05959	.08467	.20175	.08389	.19041
15	.04317	-.06969	.19175	.02482	.06322	.02996	.03679	.07014	.04217	.04777
16	.32916	.10287	.08857	-.00575	.21272	-.00966	.08901	.09319	.02165	.16390
17	.34350	-.08379	.01944	-.14978	.07092	-.04567	.13325	.11124	.18980	.07540
18	.06258	-.53740	.12480	.05648	.39319	-.28272	.06378	-.03329	.04179	.02209
19	.15884	-.03716	.06371	.04652	.72425	.10850	-.00052	.04232	-.02776	.07369
20	.19038	.20676	.12384	-.11506	.02317	.21118	-.08357	-.19698	.06268	.15327
21	.56006	-.02938	.04452	.00937	.13549	.11699	.20030	.03303	.01573	.03393
22	.25443	-.03377	.15963	-.08115	.09380	.13772	.05245	.21206	.05234	.16850
23	.09714	-.02020	.85252	-.07440	.07109	.00373	-.00338	.03791	.07373	.03129
24	.15829	.01661	.81785	-.07681	.03662	.03878	.07563	.04602	.04282	.08838
25	.70860	.02216	.12046	-.08142	-.12066	.00129	.10457	-.05966	.05538	.11005
26	.74425	.01126	.06573	-.07508	-.01196	.07566	.14320	-.00139	-.01931	.04061
27	.27402	-.07676	.10097	-.07138	.10710	-.00254	-.00472	-.01456	.18360	.04257
28	.13113	.00000	.09717	-.09361	.07115	-.03312	.05158	-.01002	.02387	.07699
29	.17230	.02172	.12175	-.51416	.03171	.12993	.04026	-.04573	.28614	.23559
30	.14304	.03611	.09073	.85724	-.04522	.02924	.07848	.08075	-.09946	.08235
31	.17110	-.08163	.05035	-.13090	.32679	.16575	.09328	.24381	-.11579	.01116
32	.14585	-.02685	.09666	-.09138	.08133	.01392	.08566	.16804	.04344	.07881
33	.66178	-.07533	.27894	-.07566	.22867	.02582	.02434	.10390	.03999	.22101
34	.03113	.90259	.02289	-.03216	.02498	-.09227	.04471	.01968	.06843	.07190
35	.20231	.03431	.07485	-.05491	.05234	.01425	-.01013	.82389	.02292	.03372
36	.75373	.04843	.02440	-.13468	.15680	.02033	.02075	.27754	.07914	.09778
37	.24483	.04842	.09642	-.12944	.07859	.15905	-.00102	.17107	.05945	.09033
38	.35147	.14434	.25243	-.31760	.21365	.17522	-.06185	-.11002	.14622	-.01121
39	.40276	.05743	.09668	-.16657	.27540	-.04538	.12223	.19262	.01355	.16101
40	.42995	.03869	.27036	-.00663	.40047	.05339	.03153	.12317	.12258	.03350

Rotation of
22 Factors (continued)

TABLE 27--(Continued)

VARIABLE	FACTOR 11	FACTOR 12	FACTOR 13	FACTOR 14	FACTOR 15	FACTOR 16	FACTOR 17	FACTOR 18	FACTOR 19	FACTOR 20
1	.06917	-.01303	.07670	-.01845	.04678	-.06381	.90886	-.12086	-.01596	.05263
2	.05172	-.07101	.10586	-.11983	.04707	-.02769	.10445	-.07626	-.03552	.05581
3	.07771	-.03495	.03366	-.00384	-.02165	.05990	.06315	-.00059	-.15554	.13370
4	.04189	.01532	-.03268	.03892	.04031	-.09660	.04203	-.06034	-.03764	.00162
5	.05789	.02322	.17320	-.06415	.09408	-.01744	.08153	-.03566	-.07479	.08962
6	.07062	-.03275	.92463	-.03172	-.01306	.02184	.06982	-.06967	.00950	.06064
7	.02644	-.24375	.24929	-.19258	.13692	.10308	.19036	-.21632	.00334	.07416
8	.02618	-.87186	.03552	.00157	.10198	-.05416	.00817	-.03136	-.10378	.02194
9	.20428	-.13096	-.01012	-.04700	.16427	.02987	.01945	-.15613	-.72241	.00481
10	.08291	-.29334	.04898	-.38106	-.09999	-.24261	.03183	-.09596	.38174	.16325
11	.11639	-.07441	.03233	-.07206	.02982	.79514	.08092	-.03080	-.04629	.11173
12	.14819	-.00871	-.00054	.06727	.16249	-.53422	-.01573	-.38001	-.02452	.09355
13	.17298	-.23129	-.11766	.01147	.10857	-.16467	.03179	-.20978	-.01687	.14453
14	.10174	-.13672	.02741	-.06105	.74175	.08895	.05782	-.05510	-.16196	.02337
15	.06771	-.14726	-.00075	.06332	.05184	.01371	.06446	-.05449	.02480	.07533
16	.07599	-.02706	.04563	-.11356	-.05780	-.06632	.08474	.69546	-.13764	.04173
17	.07138	-.03389	.12617	-.03363	-.00938	-.10619	.21705	-.60208	-.15675	.26342
18	.17298	.04799	.04234	.13257	.03198	.24932	-.06028	.12280	-.06853	.30549
19	.10390	-.04575	.02455	.12877	.16483	-.17874	.09782	-.14768	-.19452	.08577
20	-.10344	.16895	.16664	-.00823	.33584	-.22287	.00841	-.09962	-.03662	.53316
21	.13636	-.01974	.11933	-.10981	-.03778	-.13480	.05577	.13849	-.02664	.30931
22	.17059	.12421	.02628	.00344	.01812	-.02567	.08349	-.13772	-.01245	.68447
23	.10797	-.09684	.00788	.00344	.01812	.02567	.03910	-.10481	-.11809	-.00226
24	.05065	-.00691	.04748	-.12224	.06735	-.12700	-.01850	.02160	.07352	.16513
25	.13834	-.05808	.05485	-.16746	.13501	-.02846	.07819	.17671	-.11033	.21123
26	.13814	-.06777	.13404	.16722	.13530	-.00975	.12654	-.24408	-.11953	.09354
27	.18617	.02005	.04355	-.75321	.08874	-.03899	.02115	.11448	-.04852	.13345
28	.84573	-.06017	.11470	-.09727	.05817	-.04229	-.00471	-.02488	-.14209	.11945
29	.24182	.10518	.03710	-.16869	.07986	-.11603	-.06371	-.29862	.09375	-.01803
30	.11278	-.08058	.01812	-.01318	.04265	-.06310	.03019	.00582	-.04760	.04167
31	.22632	-.25106	-.01609	-.22486	.35391	.11143	.02726	.39031	.24771	-.04834
32	.11769	-.03742	.06007	-.14471	.00171	-.05324	.03019	-.06598	-.10395	.0714
33	.09240	.02244	.00136	.02685	-.08357	-.13337	.03243	-.04306	-.04161	-.07071
34	.07649	.07937	-.01763	.08074	-.01159	.08197	.03243	-.04926	-.01211	.07555
35	.11305	-.02020	.09741	.00210	.17298	-.01799	-.00492	.11822	-.10964	.08032
36	.07425	-.07013	.04258	-.08028	.05472	-.11746	.09302	-.07570	.01451	.02816
37	.73066	.02251	-.03107	-.05966	.06796	-.12606	.11139	-.13493	-.04444	-.02609
38	.16166	-.21788	.02406	.06048	.13713	-.03476	.02561	-.10493	-.08574	.21440
39	.31928	-.20800	-.07338	-.13850	-.03367	-.19371	-.00251	.00039	.15709	.24454
40	.13825	-.10414	.11818	.01251	-.06239	-.13957	-.16890	-.28908	.09805	-.03966

TABLE 27--(Continued) Rotation of
22 Factors (continued)

VARIABLE	FACTOR 21	FACTOR 22
1	.03073	.06748
2	.04723	-.04237
3	.02258	.03148
4	.02341	.08129
5	-.00706	.05281
6	.05267	.00495
7	.20056	-.16531
8	.03945	.13429
9	.16545	-.04987
10	-.15821	.09373
11	.02080	-.04200
12	.17415	.09289
13	.15310	.01393
14	-.00360	.07447
15	.09345	.89266
16	.05512	.10078
17	.03121	-.03039
18	.19275	.01048
19	.05604	.07387
20	.09389	.25573
21	-.01442	.03790
22	.02622	.03229
23	.05938	.11563
24	.04039	.07443
25	.03855	.12219
26	.07922	.04422
27	.19880	.07942
28	.08960	.02406
29	.03949	.06144
30	.06824	-.04488
31	.12195	-.02848
32	.83284	.09698
33	.23811	-.03395
34	.02445	-.05958
35	.17071	.07664
36	-.02089	-.04559
37	.05095	.06961
38	.30022	.13211
39	.13003	-.09846
40	.26176	.10271

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